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1857

V. 14

Brought from the Lords, 20 August 1857.

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R E P O R T

FROM THE

SELECT COMMITTEE OF THE HOUSE OF LORDS

ON THE

SALE OF POISONS, &c. BILL (H.L.);

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

MINUTES OF EVIDENCE,

AND

I N D E X.

Ordered, by The House of Commons, to be Printed,

21 August 1857.

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R E P O R T.

BY THE COMMITTEE appointed to consider the "SALE of POISONS, &c. BILL," and to report to The House; and to whom were referred several Petitions relating to the subject-matter of the Inquiry.

ORDERED TO REPORT,

THAT the Committee have met, and considered the said Bill, and have examined several Witnesses in relation thereto, and have directed the Minutes of Evidence taken before them to be laid before your Lordships.

And the Committee have gone through the Bill, and directed the same to be reported to your Lordships, with some Amendments.

10th August 1857.

ORDER OF REFERENCE.

Die Jovis, 4° Junii 1857.

“Sale of Poisons, &c. Bill [H. L.] :—That the said Bill be referred to a Select Committee to consider and report.”

The Lords following were named of the Committee:

Ld. President.

D. Somerset.

M. Salisbury.

E. Derby.

E. Stanhope.

E. Hardwicke.

E. Malmesbury.

E. Grey.

L. Ponsonby.

L. Redesdale.

L. Somerhill.

L. Rossie.

L. Cloncurry.

L. Campbell.

L. St. Leonards.

L. Wensleydale.

L. Talbot de Malahide.

LORDS PRESENT, AND MINUTES OF PROCEEDINGS AT
EACH SITTING OF THE COMMITTEE.

Die Lunæ, 8^o Junii 1857.

LORDS PRESENT:

Lord President.
Duke of Somerset.
Lord Ponsonby.
Lord Rossie.

Lord Cloncurry.
Lord Wensleydale.
Lord Talbot de Malahide.

Order of Reference read.

Order of the House of Thursday last, empowering the Committee to appoint their own Chairman, read.

It is proposed, That the Lord President should take the Chair.

The same is agreed to, and the Lord President takes the Chair accordingly.

Discussion.

Ordered, That the Committee be adjourned to To-morrow, half past Three o'clock.

Die Martis, 9^o Junii 1857.

LORDS PRESENT:

Lord President.
Duke of Somerset.
Marquess of Salisbury.
Earl Stanhope.

Lord Rossie.
Lord Cloncurry.
Lord Wensleydale.
Lord Talbot de Malahide.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of yesterday are read.

Order of the House of 8th June last, referring to the Committee a Petition of the Liverpool Chemists Association against the Bill, read.

The said Petition is read.

The following Witnesses are called in, and examined, and are directed to withdraw, viz.: *Jacob Bell, George Waugh, and Thomas N. R. Morson.*

Ordered, That this Committee be adjourned to Friday next, half past Three o'clock.

Die Veneris, 12^o Junii 1857.

LORDS PRESENT:

Lord President.
Duke of Somerset.
Marquess of Salisbury.
Earl of Derby.

Earl of Hardwicke.
Lord Rossie.
Lord Wensleydale.
Lord Talbot de Malahide.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Tuesday last are read.

The following Witnesses are called in, are examined, and are directed to withdraw, viz.: *Jacob Bell, Peter Squire, Thomas N. R. Morson, William Lionel Bird, and Henry Deane.*

Ordered, That this Committee be adjourned to Monday next, half past Three o'clock.

Die Lunæ, 15^o Junii 1857.

LORDS PRESENT :

Lord President.
Duke of Somerset.
Marquess of Salisbury.
Earl of Derby.

Lord Ponsonby.
Lord Rossie.
Lord Wensleydale.
Lord Talbot de Malahide.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Friday last are read.

Orders of the House of 12th June last, referring to the Committee a Petition of certa in Chemists and Druggists of *Nottingham*, against the Bill; and, of *John Stephens*, against restricting the sale of the drug "*Lobelia*," read.

The said Petitions are read.

The following Witnesses are called in, and examined, and are directed to withdraw, viz.: *John Abraham; John Baker Edwards.*

Ordered, That this Committee be adjourned to To-morrow, Two o'clock.

Die Martis, 16^o Junii 1857.

LORDS PRESENT :

Duke of Somerset.
Earl of Hardwicke.
Lord Somerhill.

Lord Rossie.
Lord Wensleydale.
Lord Talbot de Malahide.

In the absence of the Lord President, it is proposed that the Duke of *Somerset* should take the Chair.

The same is agreed to; and the Duke of *Somerset* takes the Chair accordingly.

Order of Adjournment read.

The Proceedings of the Committee of yesterday are read.

The following Witnesses are called in, and examined, and are directed to withdraw, viz.: *William Herapath; John Hammill.*

Ordered, That this Committee be adjourned to Friday next, Two o'clock.

Die Veneris, 19^o Junii 1857.

LORDS PRESENT :

Lord President.
Duke of Somerset.
Marquess of Salisbury.
Earl of Derby.

Earl Stanhope.
Earl of Munster.
Lord Talbot de Malahide.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Tuesday last are read.

Order

Order of the House of the 16th, adding the Earl of *Munster* to the Committee, read.

The following Witnesses are called in, and examined, and are directed to withdraw, viz.: *Frederick Crace Calvert*; *Walter Wilson*.

Ordered, That this Committee be adjourned to Tuesday next, Two o'clock.

Die Martis, 23° Junii 1857.

LORDS PRESENT:

Lord President.
Duke of Somerset.
Marquess of Salisbury.

Earl of Derby.
Lord Somerhill.
Lord Talbot de Malahide.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Friday last are read.

The following Witnesses are called in, and examined, and directed to withdraw, viz.: Professor *William Thomas Brande*; *Samuel Joseph Burch*.

Ordered, That this Committee be adjourned to Tuesday next, Two o'clock.

Die Martis, 30° Junii 1857.

LORDS PRESENT:

Lord President.
Duke of Somerset.
Marquess of Salisbury.

Earl of Derby.
Lord Somerhill.
Lord Rossie.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Tuesday last are read.

The following Witness is called in, and examined, and directed to withdraw, viz.: Professor *Alfred Swayne Taylor*.

Ordered, That this Committee be adjourned to Thursday next, Two o'clock.

Die Jovis, 2° Julii 1857.

LORDS PRESENT:

Lord President.
Duke of Somerset.
Marquess of Salisbury.

Lord Somerhill.
Lord Rossie.
Lord Talbot de Malahide.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Tuesday last are read.

Order of the House of 30th June last, referring to the Committee a Petition of certain Chemists and Druggists of York, against the Bill, read.

The said Petition is read.

The following Witnesses are called in, and examined, and directed to withdraw, viz.: Dr. *John Moore Neligan*; Professor *Alfred Swayne Taylor*.

Ordered, That this Committee be adjourned to Tuesday, 21st, Three o'clock.

Die Martis, 21° Julii 1857.

LORDS PRESENT :

Lord President.		Earl of Derby.
Duke of Somerset.		Lord Rossie.
Marquess of Salisbury.		Lord Wensleydale.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Thursday, the 2d, are read.

Discussion.

The Preamble is postponed.

The Clauses of the Bill to Clause 6, are read and considered, Amendments being made therein.

Ordered, That this Committee be adjourned to Thursday next, Three o'clock.

Die Jovis, 23° Julii 1857.

LORDS PRESENT :

Lord President.		Lord Rossie.
Duke of Somerset.		Lord Wensleydale.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Tuesday last are read.

The Clauses of the Bill are further considered.

Ordered, That this Committee be adjourned to Monday, August 3, Three o'clock.

Die Lunæ, 3° Augusti 1857.

LORDS PRESENT :

Duke of Somerset.		Lord Wensleydale.
Lord Rossie.		

In the absence of the Lord President, it is proposed that the Duke of *Somerset* should take the Chair.

The same is agreed to; and the Duke of *Somerset* takes the Chair accordingly.

Ordered, That this Committee be adjourned to Friday next, Three o'clock.

Die Veneris, 7° Augusti 1857.

LORDS PRESENT :

Lord President.		Lord Rossie.
Duke of Somerset.		Lord Wensleydale.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Monday last are read.

The Clauses of the Bill are read and considered, and further Amendments made therein.

Ordered, That this Committee be adjourned to Monday next, Four o'clock.

Die Lunæ, 10^o Augusti 1857.

LORDS PRESENT :

Lord President.
Duke of Somerset.

| Lord Somerhill.

The LORD PRESIDENT in the Chair.

Order of Adjournment read.

The Proceedings of the Committee of Friday last are read.

The several Clauses of the Bill are read, and agreed to, with Amendments.

The Schedules are read, and agreed to, with Amendments.

The Draft of a Report having been prepared, the same is read by the Clerk, and agreed to. (*Vide* the Report.)

Ordered, That the Lord in the Chair do make the said Report to the House, and do also report the Bill, with the Amendments.

MINUTES OF EVIDENCE.

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LORDS PRESENT:

LORD PRESIDENT.
Duke of SOMERSET.
Marquess of SALISBURY.
Earl STANHOPE.

Lord ROSSIE.
Lord CLONCURRY.
Lord WENSLEYDALE.
Lord TALBOT DE MALAHIDE.

THE LORD PRESIDENT in the Chair.

Evidence on the
Sale of Poisons, &c.
Bill.

JACOB BELL, Esquire; THOMAS NEWBORN ROBERT MORSON, Esquire;
and GEORGE WAUGH, Esquire; are called in, and examined as follows:

Jacob Bell, Esq.
T. N. R. Morson,
Esq.
George Waugh, Esq.

1. *Chairman* (to Mr. Bell).] WILL you state what society you are here to represent?

9th June 1857.

The Pharmaceutical Society of Great Britain.

2. Will you state to the Committee what the Pharmaceutical Society is?

The Pharmaceutical Society is an institution established for the purpose of promoting education in those who dispense medicine. It was founded in the year 1842; and it was originally designed to comprise all persons who should in future dispense medicines. A charter was obtained in the year 1843, sanctioning the society as a voluntary institution; and, from that time, efforts were made every year to obtain the passing of an Act confirming the charter, which was effected in the year 1852. The charter was granted on the 18th of February 1843, and the Pharmacy Act is the 15th & 16th Victoria, chapter 56. The powers which were sought to be obtained in the Act were not granted, but merely an honorary distinction was given to those who should think proper to comply with the requisitions of the society, by passing an examination; the object being that, in future, all pharmaceutical chemists should pass an examination, as a security to the public that those who deal in medicines, many of which are strong poisons, should be fully qualified for that important duty. The society has, since its formation, devoted itself to the education of pharmaceutical chemists, having a school and lectures, which are given gratuitously, and also a practical class, where chemistry is taught on payment of a fee, which barely pays the expenses. The society has expended in money, since it was established, nearly 3,000 *l.* a year in these educational purposes; and a considerable number of chemists have been examined, and are now in business as pharmaceutical chemists in different parts of the country; but, it being a voluntary association, there is no power to bring any persons within its operation, excepting the stimulus afforded by the desire of distinction. The society has devoted a good deal of attention to the subject of the sale of poisons, and the precautions which are required in reference to their sale; but it has always been the opinion of the society, that security of the public would be better effected by an attention to the intelligence and qualification of the vendor, than by any arbitrary regulations with regard to the shape of the bottles, or to the obtaining of certificates from clergymen or justices of the peace, or those various regulations which have been proposed in the Bill now before the House of Lords.

3. Will you be so good as to state, generally, your objections to the provisions of the Bill, which I believe you have had an opportunity of considering;
(37. 1.) A 2 afterwards,

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George Waugh, Esq.
9th June 1857.

afterwards, to its details; and then suggest to the Committee any substitutes which may occur to you to be desirable?

The second section of the Bill proposes to repeal the Arsenic Act, with the view, as it appears, of re-enacting it, including a variety of other substances with arsenic. In our opinion, the Arsenic Act has done some good; and, so far as relates to arsenic, it is practicable and judicious.

4. Will you state what amount of good, in your opinion, has been done by that Act?

Simply by creating a difficulty in obtaining arsenic; it has increased the difficulty of obtaining arsenic. No Act of Parliament will ever prevent the sale of arsenic, or of any poison, to a person who is determined to have it; but in many cases where persons who are not to be trusted have asked for it, they have been refused, and it affords a very convenient excuse for a chemist to decline to sell it; he says, "There is an Act of Parliament in force which is a reason why I decline to sell it."

5. So that you think that it has thrown difficulties in the way of the purchaser, and has also to a certain extent been of use to the seller in giving a civil excuse to the intended purchaser?

Yes. So far as relates to the sale of arsenic we think that it has done some good; but if all the alkaloids, prussic acid, belladonna, stramonium, chloroform, nux vomica, tartarized antimony, and all these other preparations were to be added, it would become entirely impracticable to carry out such a Bill; therefore, we consider that it would be much better to leave the Arsenic Act where it is, and to deal with the other poisons in a different way. There might possibly be a few which could be dealt with in a similar way to the Arsenic Act, but the number is exceedingly limited, and would require a great deal of consideration in the settlement which they should be. In the construction of the Act the word "poison" is said to apply to a variety of substances in the Schedule, together with any others which may at any future time be added by Her Majesty in Council. This involves the entire dispensing of prescriptions in rather a complicated position, if prescriptions are in any degree affected by the Bill. It also affects the sale of a number of domestic medicines which are continually used by the public, and which the public understand the use of perfectly well, more particularly when supplied by a chemist who does his duty in giving the needful information. It would be a great hardship upon the public to be deprived of the use of antimony and certain preparations of opium, and many other substances which are mentioned in the Schedule.

6. Lord Cloncurry.] But would you call it being deprived of the use when there was merely a slight difficulty put in the way of the purchase?

The difficulty of obtaining an order from a clergyman or a justice of the peace on each occasion of the purchase of any of these medicines would in many cases be almost tantamount to a prohibition, and it would throw upon the clergyman and the justice of the peace an amount of responsibility which they would, I should think, be very unwilling to enter upon. It would also take away from the pharmaceutical chemist, the person who sells the poison, that responsibility which at present is a great safeguard to the public.

7. Chairman.] You are probably not aware that, in moving that The House should go into Committee upon this Bill, I stated that I proposed to add the certificate of two resident householders, which I think might be reduced to one; would that diminish your objection to this clause?

It would certainly diminish it.

8. Do you think that it would be objectionable in that case?

I think that, with the large number of substances mentioned in the Schedule, it would be too much to expect that there should always be a certificate in every case where any one of these substances is sold.

9. Lord Rossie.] Merely the security of one householder?

I think, with so large a number of articles as there are in the Schedule, that would be rather an extreme provision.

10. You think that any authority whatever for procuring the article would be difficult?

I think

I think it would; I think there would be a difficulty in it, considering the number of preparations. A chemist who understands his business takes the requisite precautions himself; he would always ascertain that the person applying for the poison understood the use of it before letting him have it.

Jacob Bell, Esq.
T. N. K. Morson,
Esq.
George Waugh, Esq.

9th June 1857.

11. *Chairman.*] Then your objection to the fifth clause extends to any certificate whatever, notwithstanding the exceptions mentioned in the 11th clause, of which I believe you are aware?

I should not like to be too positive in objecting to so modified a proposition as that; but I should like that, before giving a positive opinion, we should have an opportunity of conferring together upon the subject. It certainly would be much less objectionable than the Bill in its original state.

12. What is your next objection?

Then, with regard to the sixth clause, it appears to be rather a complicated system, the entry and registration of every sale, considering that a number of domestic medicines which are, in fact, poisons, are continually sold in very small quantities; and it would be a very great obstruction to ordinary business if every sale must be attended with the complicated machinery applied in the sixth clause.

13. Is it now your practice to make no entry when you sell poisons?

Yes; with the exception of arsenic, there is no registration of the sale of poisons.

14. With regard to the sale of strychnine, do you make no entry?

Practically, we scarcely sell it at all; it is in almost every case refused. Chemists sometimes have a very long correspondence with persons desirous to obtain it, and in many instances they decline at last to sell it at all.

15. *Lord Rossie.*] Is that a new regulation?

I am speaking of the conduct of individuals; there is no law of the society connected with the subject.

16. *Marquess of Salisbury.*] Would there be any objection to a registration of all the poisons, in the same manner as there is a registration with regard to arsenic?

I think it would be impossible to extend it to all poisons; nine out of ten of the substances which we sell are poisons, if taken in too large a dose.

17. *Lord Cloncurry.*] But is not the entry in the day-book of the establishment virtually a register of the sale of the poison?

Where the sale is entered in the day-book it would be so, but it would not be the case if a pennyworth of precipitate powder, or any simple preparation of that sort, were required for domestic use; we should not put down every pennyworth in the day-book.

18. *Marquess of Salisbury.*] How, then, would it be entered with regard to the receipts for the day?

It would merely be entered under the head of sundries; if 20 customers came in for a pennyworth each, it would be put down as "sundries 1 s. 8 d.," and frequently, in the hurry of business, it is impossible to enter every small customer that comes into a shop.

19. You could not then enter the delivery of any poison not under the prescription of a physician?

It might be done with regard to certain very dangerous poisons; but to extend it to everything which comes under the definition of "poison," according to the strict meaning of the term, would be utterly impossible.

20. *Chairman.*] Therefore by the present practice you have no means of giving evidence as to any poison sold excepting the personal recollection of either yourself or your assistant who may have dispensed it?

No.

21. *Lord Talbot de Malahide.*] I suppose your business is conducted like most other businesses. As I understand you, where a party pays ready money, there is no entry; but where there is an account kept, the particulars are entered into a book as to the articles which are sold?

(37. 1.)

A 3

That

Jacob Bell, Esq.
T. N. R. Morson,
Esq.
George Waugh, Esq.

That is the fact; where the account comes to a shilling or upwards, it would be entered for the purpose of accuracy in the accounts, but for no other reason.

9th June 1857.

22. *Chairman.*] In this case is the objection to the complication of the entry, or to any entry being required for the greater quantity of poison sold?

The objection applies to the extended list in the Schedule, and the complication of the entry. If you extend the schedule, so as to comprise so large a number of domestic medicines which are in constant use, it will offer a very great and a needless obstruction to business to require them all to be entered in the manner prescribed in the sixth clause. If you diminish the number of poisons, it will then be much easier to comply with the sixth clause.

23. What is your next objection?

In the seventh clause it is stated that "No poison sold shall be wrapped in paper only without a covering of tinfoil." That appears to be almost an impracticable regulation, inasmuch as it would apply to pounds of oxalic acid, and other large parcels of that description, and it would be of very little use, inasmuch as the tinfoil would be thrown away. I have not been able to ascertain what the object of the precaution is, more particularly as tinfoil is used frequently for many medicines containing essential oil, where the oil would be absorbed in the paper, such as cubeb powders, and other powders with some essential oil mixed with them, which are wrapped in tinfoil, and taken by the patients. If patients are taught that anything wrapped in tinfoil is poison, they will be afraid to take the powders under those circumstances.

24. *Lord Cloncurry.*] Could you suggest any distinctive mark as to poison which would be more acceptable to the society which you represent?

I believe that the labelling of everything with the word "poison" is the best safeguard which could possibly take place.

25. *Chairman.*] Will you state any other objections which you have to this clause, and then state what you think would do instead of the regulations proposed?

The clause proceeds to enact that "every bottle containing poison shall have the word 'poison' cast or moulded in raised letters on four sides of the bottle." We are quite unanimous in objecting to that regulation, as giving a false security; because although you may compel the chemist to sell the poison in a square bottle with "poison" on it, you cannot compel the customer to use that bottle exclusively for poison; poor people will use whatever bottles they find for any purpose that they require, and it would be utterly impossible to cause that law to be carried out in practice by the public even though it were observed by the trade.

26. *Lord Talbot de Malahide.*] Would you object to triangular bottles?

We object to any regulation which cannot be invariably acted upon, on the same principle that a post and rail placed outside of a pond, if it is placed there at all, should be so strong as not to break the first time a person leans against it; it would be better to have no post and rail at all, which would cause people to keep at a proper distance, than to have one which would deceive you as soon as you began to rely upon it; and that is our opinion with regard to the security which is supposed to exist in the shape of the bottles.

27. *Chairman.*] Then you think that the safety of the consumer is advanced by the want of any warning on the part of the seller of the poison?

The safety of the consumer would be more secured by the chemist labelling everything, and giving proper directions, and by the consumer using common sense in the use of these things. The idea, that because an article is in a bottle of a particular shape, it is therefore either safe or unsafe, according to that shape, is an assumption that other senses are not to be resorted to.

28. Do you ever in your practice, and do other chemists, use any particular shaped bottle, or any peculiarly-colored bottle, to denote either that it is for outward use, or that it contains poisonous matter?

We do in some cases; where a prescription orders a liniment and a draught of the same size, we have the custom of putting the liniment in a blue bottle.

29. With

29. With what object?

Simply for the convenience of the patient.

30. Why do not you, in that case, trust to the common sense of the purchaser, and to the label?

It is simply a slight assistance to the patient in the use of these articles but from having been many years in the habit of adopting that precaution, and finding that there are only certain cases to which it is applicable, I am of opinion that the enforcing of it by an Act of Parliament would be impossible. There are many cases where you cannot obtain a bottle of exactly the size which you require.

31. Lord *Cloncurry*.] Are you not aware [that the patentees of any patent medicine are in the habit of inventing for their own purposes a peculiar bottle to contain the description of medicine for which they have taken out a patent?

Yes, they do so; and these bottles are very often square, with letters upon them; and, consequently, if the public were taught that all square bottles with letters on them were hazardous, that being the form adopted for poisons, they would be afraid to take a variety of substances which are continually used and recommended for internal use.

32. *Chairman*.] Would not the patentee take the security of altering the shape of his bottle in order to sell his medicine?

It would be much more probable that the public, from knowing that a great many medicines were always sold in bottles of this form, would cease to place any reliance on the shape at all, and that it would become a dead letter.

33. Lord *Wensleydale*.] Supposing that all poisons were required to be in bottles of a triangular shape, which is very uncommon, and I believe scarcely ever used, would not that be a guard to the public in purchasing poisons?

You would not be able to prevent the public using these triangular bottles for any purpose that they might require.

34. Lord *Rossie*.] But purchasing is the question; would it prevent them purchasing in such a bottle?

If the public did not regard the distinction as one for them to act upon, it would afford no security to the public. If the public were in the habit of using bottles indiscriminately for poisons, and for substances not poisonous, the distinction would cease to have any effect in protecting the public.

35. Lord *Wensleydale*.] Supposing the sale of poisons was permitted to take place in triangular bottles and in nothing else, that would be a warning to the public, and would distinguish that article from every other?

As regards the sale of any particular poison, it would at the time be distinguished; but as soon as the purchaser had emptied the bottle, and required a bottle for something else, that bottle would be used in the same way as a bottle of any other shape, and then the public would lose the idea of there being any distinction.

36. *Chairman*.] Your recommendation is, that the only distinctive mark should be a label pasted on the bottle?

Yes.

37. Lord *Cloncurry*.] Has not that been always the case hitherto, and yet we know that the results have been that numbers of accidents have occurred?

All respectable and educated chemists are in the habit of pasting labels on the bottles; but we continually hear of cases where articles of this sort are purchased at chandlers' shops, where they never think of putting on a label.

38. *Chairman*.] Then you think that in those cases it would be desirable to have the restriction made universal?

Certainly, with respect to the labelling of anything. It would be very proper that a person who should sell a dangerous or a strong substance without any label on it, should be liable to a penalty; there could be no objection to that.

39. To the vast class of uneducated persons in this country, who unfortunately cannot read with facility, do not you think that there is some advantage in that which catches their eye, even if they are not able to read the directions printed?

(37. 1.)

Jacob Bell, Esq.
T. N. R. Morson,
Esq.
George Waugh, Esq.
9th June 1857.

Jacob Bell, Esq. If it would be possible to carry it out universally, it might be an advantage ;
T. N. R. Morson, but it is on that point where we see an impracticable difficulty.

Esq.
George Waugh, Esq. 40. Lord *Rossie.*] Do not you think that if a person took up a bottle with a
 9th June 1857. peculiar mark on it, or of a peculiar shape, his attention would be more particularly directed to what was contained in that bottle?

I think it might be the case.

41. *Chairman.*] What is your next objection?

The next objection is with regard to the colouring of poisons. The eighth clause enacts, "No person shall sell any colourless poison whatsoever in a solid state, unless the same be, before the sale thereof, mixed with soot or indigo." Now, looking at the list of poisons, corrosive sublimate, the poisonous vegetable alkaloids, prussic acid, cyanides of potassium, mercury and silver, chlorides of zinc and antimony, and oxalic acid, many of these substances are used for purposes for which the colour would make them entirely unsuited. There is a provision in the clause, that when that is the case the person may purchase the poison without such admixture, in quantities of not less than half a pound; consequently, if an ounce of a poison be required, and it be stated that the colour would injure it, the customer is obliged to have seven ounces more than he wants; and supposing that to be oxalic acid, he would have a paper parcel, whether it were in tinfoil, or whatever it happened to be in, containing something very like Epsom salts, which would be a great source of danger; whereas by being permitted to purchase an ounce, which is all he wants, without the colour, he would use it, and have none in store which would be liable to accident.

42. Then you object to the whole clause, but you think that a portion of the objection would be taken away, if the limit of quantity was removed?

I think that that is one great objection to the clause, but I scarcely know any of these substances in the schedule to which the colouring with indigo or soot would be applicable, unless it be arsenic, which for certain agricultural purposes is coloured, and without any injury, and for poison for vermin.

43. Are we to understand that all the other poisons mentioned in Schedule (A.), with the exception of arsenic and its compounds, are not applicable to any purposes for which they might be used in a coloured state?

I am not aware of any one of them which could be used in a coloured state, coloured with indigo or soot. Some of them are coloured; belladonna, for example, and hemlock have a specific colour of their own, and they are only required for medicinal use.

44. Do the same objections apply to the next clause with regard to colouring liquid poisons?

Yes; the objection applies to the next clause, inasmuch as there would be no uniformity in the colour, for some of the substances would change the colour of the archil, and take it away altogether.

45. Will you mention the substances which would so affect it?

Chloride of zinc would change it; it would be also affected by acids and alkalis.

46. Would the admixture of archil, with regard to those substances which you are mentioning, change the shade, or alter the colour altogether?

In some it would alter the colour altogether.

47. To go back to the previous clause; which do you think would be the least objectionable, the colouring of solid poisons with soot or with indigo?

I scarcely know which of the poisons either of those colours would be applicable to; taking the schedule, with the exception of arsenic, I do not think there is any difference in that respect; one would be as objectionable as the other. In some cases the soot is found to interfere with arsenic as a poison for rats.

48. Lord *Cloncurry.*] Does it neutralise its effect?

They will not touch it; and consequently, although that is a minor objection, yet still it shows that, even in the case of arsenic, there is an inconvenience in the practice of colouring. But we do not insist upon that, because it is a trifling matter

matter compared with the advantage to be gained in causing an obstruction in the sale of arsenic.

49. Marquess of *Salisbury*.] Is there any other colouring matter which could be substituted for soot and indigo and archil?

I am not aware of any which would answer better.—(Mr. *Morson*.) Any universal colouring matter would greatly increase the danger of the use of poisons.

50. *Chairman*.] Why?

They would be constantly mistaken; everything having that colour would be mistaken for poison; you could adopt no colour which would not be applicable to many other substances.—(Mr. *Waugh*.) And in the case of criminal poisoning, arsenic put into puddings, and so on, persons get accustomed to this black arsenic. We know that, with great ease, we can separate the arsenic. If I wished to poison, I should be less likely to be found guilty of criminal poisoning now than I should have been two or three years ago before the Arsenic Act passed, because now, if they do not find some black flakes in the crust of the pudding, they think it is all right. The people in the country, if they found it without colour, would not suspect it. The security is really worth nothing. Of course, cunning persons in the country wishing to poison, a man like Palmer, for instance, would have been delighted if there had been nothing but coloured strychnine; the people about him would have said there was no colour in the glass; he would very soon have got the strychnine out from this coloured soot, and the arsenic is got out at once; there is no difficulty.

51. Lord *Cloncurry*.] You think that a safeguard which is not an entire safeguard is worse than none?

I think so, decidedly, especially in the present state of chemical knowledge, when we can follow these things. If the poison is there, we can get it; we do not want the colour; and we should not presume that a man was innocent because there was no colour.

52. *Chairman*.] Would your observations apply to unintentional poisonings?

Accidental poisoning I do not think those observations would enter into at all; people would just get acquainted with this black colour, and when it is accidentally the case that there is the white arsenic, it gets mixed with the flour. The cases are so very rare, that I think we feel a difficulty in legislating about it altogether. But if the public are led to believe that they are just to trust to colour, there will be more poisoning, especially when they can get poison so easily uncoloured; they have only to make a false affidavit.

53. Lord *Wensleydale* (to Mr. *Bell*).] Which are the colourless solids in Schedule (A.)?

The poisonous alkaloids, the cyanides of potassium, mercury and silver, chloride of zinc, and oxalic acid and binoxalate of potash, which are used for bleaching straw and cleaning boot tops. Tartarized antimony is also a colourless solid. There is no purpose for which tartarized antimony is ever used in which the colour would be admissible.

54. It would be injurious in every case, you say, in which it is used?

It would interfere with the use of it; it is commonly used as a domestic medicine, given every day by mothers to their children.

55. *Chairman*.] In that case would it not be exempt from the necessity of being coloured?

It would; but then it is in the schedule nevertheless.

56. But its being in the schedule would not prevent its exemption?

No; but there appears to be no advantage in putting a substance in the schedule which is entirely exempt from the operation of the Bill; it might as well be put in Schedule (B.), which it ought to be, certainly.

57. As being innocuous?

As being one to which the Act ought not to apply. I am speaking of such a case as that of tartarized antimony, which is in continual use in all families; it is one of the most common remedies for children. The 11th section, I was about to observe, exempts a variety of non-professional trades altogether from the operation of the Bill in the buying or the selling of any poisonous article.

(37.1.)

B

58. Before

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58. Before you go to the 11th clause, I had better state that I propose to omit in the 20th line the words "by or"?

Then in future those parties would not be able to sell the poisons, but they might buy.

59. So altered, have you any objection to that clause?

I believe it would be impossible for such an Act to be carried out, without exempting the parties mentioned there from some of its provisions. We also think that the words "pharmaceutical chemists" ought to be introduced; that they ought to be exempted from the operation. Legally qualified medical practitioners are exempted. The pharmaceutical chemists are recognised by law as being legally qualified in pharmacy, and we consider that therefore the term "pharmaceutical chemists" ought to be included in the exemption in this clause, inasmuch as the public are quite as safe in the hands of an educated pharmaceutical chemist, with regard to the sale of a poison, as they would be in the hands of a medical man.

60. Then you would propose to alter this clause, by inserting in it an exemption from the operation of the Act of all those persons; how would you describe them?

"All registered pharmaceutical chemists."

61. Lord *Rossie*.] All persons belonging to your society?

They might be members of the society or not; some are on the register of pharmaceutical chemists who are not members. The society is empowered to examine any person who comes up for examination, and to grant a certificate; and upon that certificate being given, the person is placed on the register as a pharmaceutical chemist.

62. You would exempt any one having a certificate from your society?
 As a pharmaceutical chemist.

63. Lord *Talbot de Malahide*.] As I understand you, you consider that the only efficient safeguard to the public against either criminal or accidental poisoning is, by having the selling of these poisons vested in the hands of competent and properly educated persons?

We consider that that is by far the greatest security which the public can possibly have with regard to this subject.

64. In the list of poisons almost all drugs are contained?
 I should think nine out of ten.

65. I therefore presume that you consider that the public have no possible security as long as drugs are sold by parties who have not given satisfactory evidence of their having passed a proper education for carrying on their trade?
 Yes, that is our opinion.

66. And you consider that the examination which now, under the auspices of your society, is a voluntary one, ought to be made compulsory?

We think it ought, by degrees. It would be difficult to introduce any law of that sort suddenly, but that would be the greatest security which the public could have with reference to the sale of poisons.

67. Lord *Rossie*.] Do you think that the privilege of persons who had a certificate from the Pharmaceutical Society being included among those allowed to sell poisons without these restrictions, which otherwise the Act imposes, would induce parties to study and qualify themselves to get that certificate?

Yes, any privilege of that description would cause a great influx of candidates for examination, and therefore increase the number of qualified chemists in the course of a very few years.

68. Earl *Stanhope*.] What proportion do you reject of candidates who present themselves?

Sometimes we have rejected two out of ten. Speaking from memory, I should think that that was quite as many as we generally do reject; but then those who come up generally have taken a good deal of pains to prepare themselves.

69. *Chairman*.] Have you any objection to the 12th clause?

The 12th clause proposes to place all poisons in a poison closet. That appears

appears to us to be an impracticable regulation, inasmuch as it would involve the rearrangement of every chemist's establishment in the kingdom, and an alteration every time any fresh poisons were added to the Schedule by Her Majesty in Council. Besides which, these poisons are so different in their nature, that it would be difficult to classify them all in any cupboard for the purpose. And it would be impossible to keep that cupboard under lock and key; because it would be in use the whole of the day, considering the number of poisons in the Schedule which are medicines in continual use in dispensing prescriptions.—(Mr. *Waugh*.) I think that the spirit of an honest answer to that question about the cupboard cannot be given better than in this way, that if this Act were passed with this Schedule, I believe, in my own establishment, the only safe plan would be to put some few things, which cannot in any way be called poisons, in the passage, and lock the door of the shop. The Schedule really embraces almost everything; for we have so many combinations containing, in some form or other, some of the elements which appear in this Schedule, that really the shop would be the poison cupboard. The prussic acid and the preparations of opium are very frequently prescribed. We could not do it. We should have accidents in running and jostling against each other to get poisons out. I am sure that that is the fact of the case.

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70. Lord *Rossie* (to Mr. *Bell*.)] Are you aware whether any precaution has been adopted in any country, such as having separate cupboards?

There are certain poisons which are secluded in France; but I believe it is not universally or strictly carried into effect.

71. Do you know any other country where it is done?
 In Austria and in Russia.

72. And in Prussia?
 And in Prussia.

73. You think that the regulation is not carried strictly into effect?
 I believe in France it is not very strictly carried into effect; but I think that in Prussia and Austria they are rather more strict.

74. You do not speak from your own personal knowledge?
 I have travelled in those parts partly with a view of ascertaining the system adopted as nearly as I could, but the information, of course, I obtained from individuals, and I believe that the law is much more strictly carried out in Prussia and Austria than it is in France. I judge from conversations which I have had with persons.

75. Lord *Wensleydale*.] Is the list of poisons large which are set apart?
 It is rather a large list; in the Austrian Pharmacopœia there is rather an extended list.

76. Are there as many as there are in the first Schedule here?
 I think there are.

77. *Chairman*.] Are you at all aware whether there is more poisoning in Prussia or in France than in this country?

I have no statistical information upon the subject. (Mr. *Morson*.) There is no more precaution taken in France than in this country with regard to keeping poisons. I resided there for some years; the poisons were distributed exactly in the same way in the chemist's shop, without any distinction; the people were better educated, and comparatively few accidents occurred.

78. Lord *Cloncurry* (to Mr. *Bell*.)] Have you not often read in the newspapers, that even the head of a chemical establishment, not a shop-boy or an uneducated assistant, has made a mistake in reaching up for a bottle, in the dusk of the evening we will suppose, the colour of the two jars or bottles having been exactly similar. We have frequently read on the examination upon coroners' inquests that the chemist unfortunately reached down the wrong vessel from its having happened to be side by side with what he intended?

That has happened, and it has also happened that a Judge has reached down the wrong Act of Parliament, and that there has been a new trial on the ground of misdirection; but that is simply because all human beings are liable to mistake.

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79. Do not you think that it would have been less likely to have occurred if he had had to go to a closet which was specially known as the closet where all that class of medicines was contained ; do not you think that it is much more likely that that occurrence would not have taken place under those circumstances than with the two vessels, side by side, on the same shelf ?

There would then be this other inconvenience, that when he has fetched his bottle of morphia, or whatever it may be, to weigh out the quantity required, he gets an accumulation of these little bottles on the counter before him, and he must either leave his customers while he goes back to the closet to take each bottle the instant he has used it, or else there will be these poisons distributed on the counter before him. In practice there would be considerable difficulty attending that, although it may appear not so clear to those who have not stood in a shop and actually seen the inconvenience of such regulations.

80. *Chairman.*] Is there any limit of age in practice with regard to the assistants of pharmaceutical chemists ?

No.

81. Is there any examination into their competency ?

There are three examinations ; there is the examination of apprentices in the classics ; a very lenient examination just with reference to their original education at school ; there is the minor examination in chemistry, pharmacy, materia medica, and botany for assistants, and there is the major examination for the full qualification of a pharmaceutical chemist.

82. Is there any restriction in practice with regard to the persons employed in the shops of members of the Pharmaceutical Society, by which security is taken that the assistants are not perfectly incompetent ?

It is the custom in many houses only to take assistants who have passed the examination ; that is becoming a custom, but there is no law to prevent a chemist taking any person.

83. And there is no regulation among yourselves which prevents your employing incompetent assistants ?

No. In fact the supply of assistants is not yet sufficient. It would be impossible for us to carry out a regulation of that sort, because we must first get a supply sufficient for the demand.

84. Have you seen a pamphlet which has been sent to me, called "Minute of Committee on the Indiscriminate sale of Poisons," from the Manchester and Salford Sanitary Association ?

No, I have not seen it.

85. In their Appendix, I see that the committee state that they had been favoured with an account of the regulations adopted in Prussia with regard to the sale of poisons, contributed by Dr. Briskin, royal physician of the district of Elberfeld. He gives an account of the regulations in force, and ends by stating, "With the view to furnish a small proof how rarely poisoning occurs, I beg leave to observe, that during my 15 years practice in my official situation in this place, one of the most populous districts of the state, only one instance of poisoning (that of a lad, aged 16), which was accidental, took place among our mechanics, a class of people certainly not the most praiseworthy for moral feelings." From the conversation which you have had with persons in Prussia, do you think that that statement would generally have been borne out, that the amount of poisoning was very small, either accidental or intentional ?

I have no means of giving a very definite answer to that question. I have not heard that poisoning is very frequent in Prussia.

86. *Marquess of Salisbury.*] From what class of persons do you generally obtain the various poisons of which you make use ; are they confined to one class of persons from whom you purchase different poisons, or are they from various manufacturers of different sorts of poison ?

They are from a great variety of persons. We obtain a great variety of poisons from the herbalists ; and we obtain some from the manufacturing chemists ; some from the wholesale dealers or merchants. There are a great number of classes of persons from whom they are obtained.

87. How would this Bill affect those parties in furnishing the poisons to you?

I think it would require some consideration to answer that question. It would not affect the sale from the wholesale to the retail dealers; and consequently I suppose that the herbalists, going about and collecting poisonous herbs in the hedges, which they do, and bring them to the druggists, would be considered wholesale dealers, and would be therefore exempt from the operation of the Bill.

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88. Would, therefore, any restraint be put upon those persons in distributing poisons improperly, or without sufficient caution?

It is possible that such a Bill as this might restrain them from retailing the poisons; but I am not aware that the collectors of herbs are in the habit of retailing them. I have never heard of any accidents from that source.

89. Is it not the custom of the herbalists frequently to sell the poisonous herbs in country neighbourhoods?

The herbalists do so. The persons who keep shops for the sale of herbs, sell them by the pennyworth to any person who asks for them.

90. Would this Bill restrain that effectually?

So far as relates to any herbs which are in the Schedule, it would; but there are a very large number of herbs which are not mentioned in the Schedule, which would be sold without any restriction whatever.

91. What effect would this Bill have in restraining the sale of opium, which I believe is publicly sold in all the grocers' shops in my own neighbourhood?

I think it would have some effect in restraining the sale, but it would be almost impossible to carry it into effect in many country districts, where pennyworths of laudanum and opium are very often sold, and habitually taken by the public at large. It is possible that some advantage might arise from restriction of the giving of opium to children. That is very common in the manufacturing districts; but it is a question which would require some medical authority to interfere with it; upon that question medical evidence should be taken.

92. Are there not many preparations which are habitually administered by the poor people to their children, and to themselves, which are as effectual poisons as those in this Schedule?

A very great many. If this Act were to pass in its present form, there would be no difficulty whatever in obtaining any amount of poison, because it only takes a very limited section of the list of poisons.

93. *Chairman.*] Have you any further objection to the 12th clause?

(*Mr. Waugh.*) There is one very great objection with regard to the proper English name. We know, as dispensers of medicine, what are the bottles containing things which would be called poisons. For instance, there is Fowler's solution of arsenic, which is, I believe, in frequent use; it is a specific in ague. They take opium, and they take Fowler's solution. One article, namely, opium, is put into this Schedule: it is a necessary: no doubt many people have used it, and taken too much. If we were to put the English name upon it, a person would come into my shop, and say, "You have put up so and so." There is prussic acid, a most valuable medicine, which we are dispensing all day long. A man sees a large label, with the word "poison" upon it; he will not touch it, and he goes to his doctor, and says, "You are giving me poison." I think that, in practice, the whole of this clause would be utterly impracticable.

94. *Lord Cloncurry.*] Do you not think it is as well that there should be as little mystery as possible in such a matter?

It would be better to ask the medical profession that question. The treatment of disease altogether is a mysterious matter, and the more the public are instructed, the more harm they do themselves. If a man's mind is a little on the go, cunning is always at work. You tell him that he shall not poison himself, and it makes him do it at once.

95. How is it possible that the non-competent assistants, which Mr. Bell says the profession are obliged to employ, on account of the scarcity in number of competent ones, are able to understand a prescription?

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It is a very easy matter. The Latinity of it is of a very simple kind; the words are usually contracted. They know the words, though many of them might not be able to put the terminations to them. I know it is the practice, and I do so myself, in engaging a young man, to give him a prescription, and to say, "Oblige me by putting the terminations to this." The words are written very short, and in many cases they are unable to do it.

96. Do you not believe that there are many occurrences, not of a fatal character, but still where wrong medicines are substituted by reason of these mistakes; that is to say, where the benefit is not derived which would be derived if the prescription were properly understood by the dispenser?

I really think not. I should be bringing a charge against one's brethren if I were to say yes. I do not think so.

The Witnesses are directed to withdraw.

Ordered, That this Committee be adjourned till Friday next,
half-past Three o'clock.

Die Veneris, 12^o Junii 1857.

LORDS PRESENT:

LORD PRESIDENT.

Duke of SOMERSET.

Marquess of SALISBURY.

Earl of DERBY.

Earl of HARDWICKE.

Lord ROSSIE.

Lord WENSLEYDALE.

Lord TALBOT DE MALAHIDE.

THE LORD PRESIDENT in the Chair.

Evidence on the
Sale of Poisons, &c.
Bill.

JACOB BELL, Esquire; PETER SQUIRE, Esquire; THOMAS NEWBORN ROBERT MORSON, Esquire; WILLIAM LIONEL BIRD, Esquire; and HENRY DEANE, Esquire; are called in, and examined as follows:

*Jacob Bell, Esq.
Peter Squire, Esq.
T. N. R. Morson,
Esq.
W. L. Bird, Esq.
H. Deane, Esq.*

12th June 1857.

97. *Chairman* (to Mr. Bell).] I THINK that at our last meeting we had gone through your objections to the first twelve clauses of the Bill. I will now ask you what objections you have, if any, to the 13th clause, and then afterwards with respect to the Schedule?

Since we had the honour of an interview with the Committee on the former occasion we have gone more completely into the Bill, and I now have in my hand a copy of the Bill, with a pen struck through the objectionable parts, so that I can, in a tangible shape, leave with the Committee the Bill so altered as that we think it would be unobjectionable. Of course, we cannot presume to suppose that every suggestion which we make will be adopted by the Committee, but we merely propose to hand it in, giving such reasons as we think, practically, will be considered to be sufficient.

98. Lord *Rossie*.] Are the reasons stated on that Bill, or are we to take them from your evidence?

They are not written; I can give verbally the reasons for each alteration, as we go on with it.

99. *Chairman*.] Will you be so good as to hand in the Bill?

I can hand it in; but in making the explanation, I should wish to refer to each point.—(*The Witness delivers in the same.*)

100. Will you state what your objections are to the 13th clause?

The objections that I have to make with regard to the 13th clause are simply these, that in the event of the other clauses being altered, it would be necessary to make this clause to correspond. For example, if the certificate of a clergyman were not required, the word "clergyman" would naturally be erased from the 13th clause, and so on in reference to the other alterations which are suggested in the other parts of the Bill. With regard to the last paragraph of this section, we consider that the provision that, for a second offence, any person should be disabled from carrying on business, would be an arbitrary and exceedingly unfair provision, of which I know no other example in any similar enactment, in this or any other country, as to the degree of severity. The penalty also appears to be rather heavy, considering the number of small offences comprised in the category in the 13th clause. For the omission of signing the name in a particular form, or of complying with any of those details in the entry, a penalty is to be incurred; and for the second offence of a like description the person is to be disabled from conducting his business in future. Probably the substitution of a lower penalty, and the erasure of the last paragraph, would meet the objections. But I think that the principal question which

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we have to refer to is the Schedule, which is the part that we now come to. I hold in my hand a copy of the Schedule amplified: that is to say, with all the compounds and subdivisions enumerated. On one page I have the articles enumerated and included in the Schedule; on the other page I have a similar number of articles equally dangerous, but not included. I have gone through this Schedule, not with a view of including all the poisons which we can find, but merely to take an even balance, and the result is, that we shall have about as many not in the poison closet as there will be in the poison closet, showing that the distinction proposed to be made by the poison closet, is a distinction without a difference. Perhaps a few examples may be sufficient to illustrate the object of this document, which I can leave with the Committee to make any use of it which may be thought desirable.—(*The Witness enumerated some of the poisons in the poison closet, and as large a number of similar substances equally or nearly as poisonous, which are not ordered to be kept in the poison closet.*)

101. Earl of Derby.] Your general statement is, that there are as large a number of poisons not enumerated under the prohibitions of the Bill, and as dangerous, as those which are enumerated?

Yes; we have not gone through the whole of the *Materia Medica*, but have merely taken at random such as have occurred to us as being similar, so as to make a parallel exhibition on one column, and the other showing the inutility of having a poison cupboard which contains substances, while an equal number of similar substances, or in fact a much longer list, which we could make, if requisite, are out of the closet.

102. What is the inference which you seek to draw from putting in that statement; is it that the list, as prepared in the Bill, ought to be increased and enlarged, or that the inherent difficulties of the case are such that it is impossible to make an enumeration of all poisons for the purpose of containing due security for the public?

The inference to which we come is, that the establishment of a poison closet is impracticable; each person must adopt the regulations or precautions in reference to these substances according to the nature of his business, because many of these articles are not kept by all chemists; some keep one class of substances more than others, and each person is the best judge of the precautions which are requisite in the keeping of them.

103. But with regard to the framing of this Bill, is the inference which you seek to draw, that this Schedule should be extended and enlarged, or that the difficulties of classing in a Schedule what poisons are to be prohibited are so great, that in point of fact the Bill in its present form cannot be properly adopted?

We have reduced the Schedule very considerably to make the Bill practicable.

104. Lord Wensleydale.] You propose to reduce the Schedule?

We propose to reduce the Schedule, and also to abandon the provision about having a poison closet. I ought to mention that it is our opinion, and it has always been so, that this Bill is commencing legislation at the wrong end.

105. Chairman.] Having stated your objections *seriatim* to the different portions of the Bill, will you now make any suggestions whether, in your opinion, this Bill can be so amended as to be made available for its object, or whether you can propose any substitute for this Bill with the same object, or whether you think that all legislation on the subject is hopeless?

I may mention that our opinions are founded partly upon the result of an investigation which took place prior to the passing of the Arsenic Act. At that time we issued a series of questions to chemists throughout all parts of the kingdom, with reference to arsenic chiefly, but also with reference to other poisons, as to their being generally sold by grocers, oilmen, and other unqualified persons. The result of that investigation, which I will, with the permission of the Committee, hand in, is contained in a printed report which was published in the *Pharmaceutical Journal*,* with all the details. The committee came to the following

* Vol. IX., Nos. 7 and 8.

following conclusion: "On a review of the entire correspondence, with the facts reported, the committee are of opinion, First, That with regular chemists and druggists proper precautions are generally adopted, and very few accidents occur. Second, That the unrestricted sale of poisons in general by unqualified persons is the great source of danger. Third, That the total prohibition of the sale of arsenic is impracticable and inconsistent with the requirements of legitimate trade." That was the decision upon which the Arsenic Act was founded.

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H. Deane, Esq.

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106. Were those the resolutions of the Council of the Pharmaceutical Society?

Those were the resolutions of the Committee of the Pharmacuetical Society; and the evidence which we received led us to the belief that any legislation would be useless which allowed poisons of every description to be sold and medicines to be dispensed at every chandler's establishment in the kingdom. This Bill, for example, prohibits the sale of poison to any person under age, but it offers no obstruction to the sale of poison by a boy of 15 or by a man of any age, who may be even worse than an intelligent boy, from being totally ignorant of the substances which he is dealing with. There is no provision whatever made for guarding the public against that which is the principal danger in existence. I have heard of a case which occurred a few weeks ago, in which a chemist's business being for sale, it was bought by a saddler, and the saddler gave an extra sum for it upon condition that all the medicines were to be labelled in English, as he was totally ignorant of medicine. While such evils as that are permitted without the slightest interference, we consider that the idea of laying down the law to chemists as to how they are to label their bottles, is entirely futile and useless. As an example of that, I may mention that in this Bill we are directed as to the particular kind of labels which we are to use. Now I have just pasted into this paper a few of the labels already in use, which would be all of them inconsistent with the terms of this Act, and yet we conceive that they are perfectly sufficient for the purpose. Again, in labelling articles in the cellar, that kind of label would be inapplicable; we have, for example, wooden labels.

107. Are not we rather going back? You gave some valuable evidence the other day on certain details of this Bill as to the form of the bottles and labels and other points of that sort. What we wish now is, to have your general view of what would be desirable for the object proposed?

It has always been our opinion that this Bill, whether entire or in any way in which it may be amended, is a very partial, and will be a very ineffectual remedy for the evil, but the object which we have had in view in revising it has been to make it unobjectionable. It may satisfy the public in some degree to know that a Poison Bill has been introduced, and we have wished to make it unobjectionable.

108. Earl of *Derby*.] Without reference to its being efficient?

To make it as efficient as such a Bill can be, but at the same time to remove the objectionable provisions in the Bill. We do not desire any limitation in the number of persons who sell poisons, but we only desire that those who do sell them shall understand what is the nature of the substances which they sell.

109. *Chairman*.] As far as I understand you, you think that this Bill, whether amended or not, is not a good one for the purpose for which it has been intended, and although by amendments you might make it less objectionable on some points which you state, yet you do not recommend it as an efficient piece of legislation for the purpose proposed?

Certainly, that is precisely our opinion.

110. Will you state what other remedy you think might be available, or whether you think that we are entirely without remedy at all?

In order to answer that question fully, it would be almost necessary to bring the draft of a Bill in my hand, which we certainly are not prepared to do at present, not knowing whether our views would be entertained at all by the Committee.

111. I think the Committee would not require you to have a Bill drawn up, but having considered the subject, you are probably able to state the
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general principles on which you would propose that such a Bill should be drawn?

In general terms I may state, that our committee consider that if any law is to be passed on the subject, it ought to refer chiefly to the persons who sell the poison, and that it ought to make provision for these persons understanding something of the business which they undertake. As at present there is absolute free trade in poisons, and in medicines generally, we consider that the first step to be taken is to commence a register of all persons at present dealing in poisons, and to enact a law that in future no unregistered person shall be permitted to sell certain classes of medicines, which might be enumerated in a Schedule of Poisons; and that, after a certain date, all persons dealing in these substances, and dispensing prescriptions for the sick, shall be required to pass an examination, either at some medical institution, or the examination of the Pharmaceutical Society. That we consider would be the most efficient security to the public against accidents from poison, and against criminal poisoning also. There are certain restrictions in the Bill which may be beneficial, with regard to the labelling of every substance which is to be used externally; those provisions we have left in the Bill unaltered; and it might be desirable to have some means of adding to the Schedule from time to time, in the event of any other poison being found to be practically in use for criminal purposes. But with regard to that subject, it would be more satisfactory to us if any additions to the Schedule, supposing such a Schedule to exist in a Bill of this description, were to be made with the concurrence of the Royal College of Physicians, they being more acquainted with medicine than it would be supposed that any Members of the Legislature are, and it would be a satisfaction that any proposition of that sort should be brought forward with their approval.

112. *Earl of Derby.*] Am I to understand that you think that, supposing there were the condition of putting certain labels upon certain poisons, there should be no restriction as to the practice of the persons who sold poison, but only a restriction upon the persons admitted to sell poison; that once admitted, there should be no restriction except that of putting certain labels?

There are certain restrictions left in the Bill, as we have altered it. Of the two principles, we consider that the principle of attending to the qualifications of the persons who sell poisons, is far more important for the security of the public, than the regulations introduced in reference to the sale and keeping of them.

113. *Duke of Somerset.*] I understand that the first step which you propose, is to register all persons throughout the country who deal in poison, whether chemists, grocers, or any others?

I would register them under the name of "Registered Druggists."

114. Having compelled them all to register, I understand that the next step which you would take, would be, that after a certain date all persons so selling should be compelled to pass an examination?

Yes. All future persons, all those who enter the trade of a chemist after a future date, should be pharmaceutical chemists.

115. But supposing that next year so many thousand people registered through England, you would, until the termination of their natural lives, allow them to go on without any examination, however ignorant they might be?

At present the law gives them unlimited power.

116. I am asking you what step you sketch forth to the Committee as your view?

There might be some restrictions placed upon them; but we consider that the medical profession and the pharmaceutical profession should be exempted from some restrictions, which might be very properly imposed with reference to ignorant persons.

117. When you had allowed all these persons to register, the difficulty of dealing with them would be greater, would it not, because they would have a claim

claim having registered, and being allowed to register; how would you proceed with those people?

They would still be subject to any restrictions which might be placed upon them.

118. Lord *Rossie*.] You consider that those who are already practising at the time when the Bill passes, have, as it were, a vested interest, and you do not propose to interfere with their practice?

I think there would be no reason why they should not be under the same restrictions with regard to the manner in which they label their goods; and with regard to the entry of the names and addresses of the persons purchasing certain poisons, in the manner which is prescribed in the Arsenic Act.

119. Duke of *Somerset*.] What would be the use of a mere register of names of persons throughout the country dealing in poisons?

It would be the commencement of the system of restricting the sale of poisons to persons who are educated.

120. But would you refuse the register to any one who applied?

Each person should give evidence that he had been in business as a chemist and druggist previously to the date of the Act.

121. Earl of *Hardwicke*.] Then afterwards you would take examinations?

Then after that we should require that they should pass an examination.

122. How would you deal with the apothecaries in this case?

They would be a privileged class; they would be exempt.

123. Like the physician?

The same as a physician.

124. Exempt altogether?

Yes.

125. If this Bill had passed as it now stands, what effect would it have had upon the apothecaries' business?

It would have had no effect, because they are entirely exempted from it.

126. Would it have thrown a great trade into their hands?

It is probable that might indirectly have affected them in that way.

127. Lord *Talbot de Malahide*.] Supposing that the Committee was not prepared to recommend, or Parliament to adopt, the course which you suggest with respect to having a register of all parties selling poisons or drugs, do you think that it would be a proper thing, in the first instance, to confine the sale of poisons to the superior class of chemists at present in practice, who go through the examination which you described to us the other day, and not to make it a matter of course that any individual who has been in the habit of poisoning the world should be allowed to do so in future?

I think that the public would derive benefit from such a regulation as that; but we should consider it rather a delicate matter to recommend it, inasmuch as we should be suspected of doing so for our own interest; but it must be seen to be a fact that any privilege which may be given to an educated class offers a premium to persons to become educated.

128. Lord *Rossie*.] You stated the other day that you had no means of obtaining, at this moment, sufficient assistants duly qualified to administer medicine?

The whole trade cannot do so certainly, because it is a work of years. Even if we had a compulsory Act of Parliament, it would be a work of years to educate a class of assistants to supply the public throughout the kingdom; and when we see that every obstacle was thrown in our way, even in obtaining a permissive Act of Parliament, I consider that we have effected an immense amount of public good, considering that it is entirely a voluntary association, much more than any other branch connected with the medical profession within that period of time.

129. Lord *Talbot de Malahide*.] Are there any other pharmaceutical societies

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Jacob Bell, Esq. in the country, with objects similar to those which you describe your society to have, namely, to encourage members to go through a voluntary examination?
Peter Squire, Esq. There are no other societies of that sort, excepting those which are in communication with us, as branches of the Pharmaceutical Society.
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130. They are all branches of your society?

They are. There are two or three auxiliary societies merely for education; but they all recommend their students, when educated, to come up to our examination; consequently we are all in harmony with each other throughout the kingdom, in England and in Scotland.

131. Duke of *Somerset*.] Assuming that some one has passed an examination in the Pharmaceutical Society, what security have the public when he sells drugs, inasmuch as his shopman, or the person who is attending and assisting in his shop, may never have passed any examination at all?

His professional responsibility is at stake in the persons whom he employs.

132. You say that he cannot get skilful assistants?

The entire body of chemists throughout the kingdom cannot do so; each one gets the best he can.

133. But, practically, they do get very ignorant persons to assist them? Sometimes they do; there is no doubt about it.

134. What security, then, will the examination of the head of the establishment give when he employs under him other people whom he must employ who have not had that examination?

There is a minor examination for assistants, and we are by degrees introducing regulations among ourselves not to take any young men who have not passed this minor examination.

135. Then in the course of time when this examination has gone on for some years,—25 years or so,—we may hope that there may be a sufficient number of assistants to chemists to prevent the public being poisoned?

In the course of five or six years there would be a very good supply if there were power by Act of Parliament to make it compulsory; but so long as it is a voluntary association altogether, the young men naturally ask this question: "Supposing I take this trouble to go to a school of chemistry, and spend a great deal of money and time in educating myself, and come up to this disagreeable ordeal, namely, the examination, am I to get a corresponding advantage?" The answer at present is, "You get no advantage except merely the title of pharmaceutical chemist." And many young men say, "What is the use of that? it is not sufficient to make it worth my while to take the trouble." But if the Legislature would add to that some tangible privilege, such as the sale of a certain class of medicines which ignorant persons would be prohibited from selling, then these young men would see directly an advantage in coming forward, and going to school and educating themselves, and by that means the public would be provided in the course of a few years with educated men. Otherwise we are pulling against the stream, and no one has the least idea of the difficulties which we have to contend with in persuading young men to come up; and when they come up, unfit to pass the examination, we have even then no power over them; but a young man who is plucked, from being totally ignorant, may commence business the next day, and say that the Pharmaceutical Society is a mere sham, which sometimes they have done, simply because they were not able to pass.

136. Earl of *Derby*.] Do not poisons, or medicines which, in certain quantities, would be poisonous, form so large a proportion of the stock of every chemist, that a prohibition from selling all which may be considered as poisons would be an absolute prohibition from exercising the business of a chemist at all?

It would almost be a prohibition.

137. Then, in point of fact, what you suggest is a register, an examination, and a licence for carrying on the business of a chemist?

Yes, it would come to that in the course of time. The liberty given would be

be merely allowing a chandler in a country town, where there was probably no druggist, to keep a few simple drugs, such as salts, senna, rhubarb, and magnesia, which could do no harm; and there could be no reason why such persons should not have that privilege.

138. *Chairman.*] Can you state what effect has been given to that regulation which exists among yourselves not to take any but examined apprentices?

I believe it is practised to the full extent of the existence of the supply. If we can possibly obtain assistants who have been examined, we take them in preference to others.

139. *Earl of Derby.*] That is to say, you take a qualified assistant in preference to an unqualified one?

Yes.

140. But if you cannot get a qualified one, you take an unqualified one?

In that case we take the best we can, and put him in a subordinate situation until he is qualified, but not entrusting him with any responsible duty until he has convinced us that he sufficiently understands his business. It is in that way that all apprentices are taught the business; they are taught first to weigh, and to fold, and to measure different substances, and then they are taught to mix compounds which are easily made; and they do it all under the eye of a person who understands it. In the course of a few years they learn sufficient of the business to be entrusted with prescriptions.

141. *Chairman.*] But practically at this time, even among the members of the Pharmaceutical Society (I am not speaking now of the large chemists in London), a great proportion of the assistants are men who have not received that education, or been subjected to that examination?

A considerable number have not been examined, but there is a very increasing desire for information among the assistants, and many of them are endeavouring to qualify themselves by private study; we have an extensive correspondence on the subject from young men, continually asking what books they ought to read. Since the Pharmaceutical Society has been in existence it has caused an entire revolution among the young men, and a very considerable improvement.

142. *Lord Talbot de Malahide.*] Do you consider that the existing law on the subject of druggists is the main cause of your finding a difficulty in procuring proper assistants?

I think that is one difficulty.

143. Not holding out sufficient inducement?

There is not sufficient inducement to them to come forward and to pass the examination; it may probably cost a young man 100 *l.* to qualify himself for the examination, to go through a complete course of study, and if he is to gain nothing by it but a mere name, he says, and his parents say, "What is the use of spending so much money?" The whole of the apprenticeship is an education: during the whole of the time that the pupil is under the care of his master he is being taught the various manipulations of the shop, but the scientific education for the business which is taught at a practical school and at lectures is something beyond the ordinary education of an apprentice.

144. *Duke of Somerset.*] The evidence which you have now given us amounts to this: your scheme, when it came into full operation, would tend to prevent poisoning by the ignorance of the shopkeeper, or of the shopkeeper's assistant; but what precaution would you adopt to prevent or to diminish the obtaining of poison by people who intend to use it for bad purposes; you have given none in your scheme; is there any means of doing so?

There is an attempt at that protection in the Arsenic Act, by requiring persons who are unknown to the vendor to produce a witness or some evidence, and to sign their names in a book.

145. Do you mean that you would apply that to every poison?

No, I think that it would be impracticable to apply it to every poison?

146. Then is there any suggestion which you can offer to the Committee for the purpose of preventing intentional poisoning by evil designing persons?

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I do not know any positive method of preventing it. If you prevent the sale of poison, you might as well prevent persons selling cutlery and ropes.

147. Could you keep a record of the names of persons to whom poison is sold? I believe that with respect to certain poisons, there is an advantage in obliging persons to keep a record of the names, but it would only be with reference to poisons which are occasionally used for criminal purposes. If you publish a large list of poisons, you are only giving the public information, and instructing the criminal.

148. Are we to understand that you think, that with regard to a limited number of poisons, a record of the names of persons to whom poison is sold should be kept?

I see no objection to it at all.

149. Do you think it would be an advantage, while you leave so many poisons without such a record?

It seems to be impossible to include the whole list of poisons, and all the precaution that can be taken must only be an approximation to safety, and selecting such poisons as are most capable of being used, or likely to be used, for criminal purposes; and those we select from experience. With regard to opium, it appears very questionable whether that ought to be introduced. We have struck it out of the schedule as being a substance coming under the same category as tobacco. It is a medical question whether persons ought to be permitted to take opium or not. In many places they take it partly medicinally, but partly as a habit; and we insist upon their taking it in China, although the Chinese object to it. Therefore it becomes a question whether it ought to be included in a schedule of poisons or not.

150. *Chairman.*] Do you believe it to be a fact that two-fifths of the poisonings which take place arise from opium?

I have no statistical evidence to enable me to answer the question, but I should think not nearly so much as that.

151. Intentional and unintentional poisonings?

I should think not nearly so much as that. Formerly it was considered that arsenic was the principal source of poisoning, but I believe that it has greatly diminished since the passing of the Arsenic Act. But then arsenic is a very peculiar substance—*sui generis*. There is no other substance which can be classed with it in that respect. It was formerly the fashionable vermin-poison used by the public, and bought habitually by the pennyworth. It was almost impossible to watch the use of it; it could be sprinkled into tea or gruel, or anything else, and it had no taste or smell. Under these circumstances the facility of purchase gave great facility for crime. Now the Arsenic Act has thrown difficulty in the way of the purchase, and consequently, as far as arsenic is concerned, although that Act has been attended with some inconvenience, it has done a certain amount of good. But I am not aware of any other substance which is ever used for criminal poisoning that would be applicable to all the regulations to which arsenic is applicable—I more especially allude to the addition of colour.

152. Lord *Rossie.*] Then you think that the throwing of difficulties in the way of procuring poison is some security against poisoning?

It is some security.

153. Earl of *Hardwicke.*] Supposing that an Act could be passed which would be so very stringent as to deal effectually with the chemists as the vendors of poison, have you ever considered in what state the public would be in reference to another very large class of the community, who could vend poison if they liked, namely, manufacturers of all classes, who use large quantities of poison?

That is one of the difficulties of legislating on the subject. It is absolutely necessary, in any Act which may be passed, to exempt certain classes of persons, who are enumerated in the 11th section of this Bill; and under those circumstances it would be very difficult to make any Act effectual.

154. Then would it not be necessary to place in such a Bill very heavy penalties

penalties upon manufacturers who vended poisons in small quantities for any purposes?

Poisons are often bought by persons who do work at home, and they require poison, such as corrosive sublimate, by the ounce, to do their work at home, and they take their work, and receive payment when it is finished.

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155. Corrosive sublimate is a very dangerous poison, is it not?

A very dangerous poison; three grains might kill a man.

156. And it would be impossible for the bronzer, or the manufacturer in brass, to carry on his trade without having a sufficient supply of corrosive sublimate.

Entirely impossible, I believe.

157. The artisans who work in bronze works, many of them in their room, in a small apartment, purchase this article in small quantities; they do not work always in the manufactory?

That is frequently the case.

158. Marquess of *Salisbury*.] Is there not, in almost every manufactory, the necessity of using some species of poison, either for colouring, or for cleansing, or for other purposes?

Yes; in a great many manufactories there are substances of a poisonous nature which are used for such purposes; but in reference to a subject of this sort, it is necessary to take evidence in different districts. For example, in Birmingham there are classes of substances continually sold among the public which in London are not so often used; and so in the manufacturing districts, in Manchester and that neighbourhood, there are other substances which are in continual use. It is necessary to obtain evidence, and that is the reason why we, in reference to the Arsenic Act, issued the list of questions which I hold in my hand; and similar questions on any subject relating to poisoning ought to be issued before any Act is passed which would affect a large branch of trade.

159. Referring to the list which you have just mentioned, have you the answers to the question, "For what trades or manufactures is arsenic required by your customers in small quantities?"

The principal purchasers of arsenic are colour and chemical manufacturers, farmers, flockmasters, veterinary surgeons, shipwrights, glass-manufacturers, candle-makers, and dyers; these employ it largely; but the smaller, or retail quantities are demanded by braziers, whitesmiths, bird-stuffers, gamekeepers, gardeners, grooms, whitewashers, painters, firework-makers, and by rat-catchers, housekeepers, and others of all classes, for the destruction of vermin of all kinds.

160. Can you state what were the replies to the question, "Is it sold by oilmen, grocers, and general dealers?"

That was generally answered in the affirmative.

161. "Would the prohibition of its retail sale be desirable?"

There were 401 persons in the country, and 108 in London, of the persons with whom we communicated, who considered that the entire prohibition was desirable, and 209 persons in the country were in favour of restrictions, but not of entire prohibition.

162. Could you put in the number of poisonings by arsenic which were returned to this paper?

I am not in possession of that return at this moment; but on reference to the papers, I might possibly obtain some information upon it.

163. Are you aware that arsenic is necessary from its use in agricultural purposes?

It was the opinion of many of the persons with whom we communicated that it was required for some agricultural purposes; for steeping wheat, and also for killing vermin, and for dipping sheep. The number of circulars which we sent out was 1,600; 1,240 in the country, and 360 in London, and the number of persons who answered was 853 in the country, and 140 in London. Of course it is rather difficult among so many answers to collect and to tabu-

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late precisely the entire particulars. The questions were confined to the members of the Pharmaceutical Society; they were chiefly sent to those who were supposed to be likely to take the trouble to answer questions of that sort.

164. *Chairman.*] I understand that the gentlemen present concur generally with what Mr. Jacob Bell has stated?
 (Mr. *Morson.*) We do.

165. *Earl of Derby.*] Are we to understand that the whole of the gentlemen present concur with the general principle, that the course of legislation ought to be registration of all persons permitted to sell poisons, and restriction upon all other persons selling any poisons?

(Mr. *Morson.*) I should think that that is the general opinion amongst the whole of us, that the only security which can be given is by educating and licensing persons who are permitted to sell certain poisons. It is a subject of extreme difficulty.

166. *Chairman.*] Then, according to your present views, although you think that a great improvement might be effected gradually by the scheme which you propose, you think that no legislative scheme which should have an immediate effect is possible for meeting the evil of which the public have lately complained, viz., the prevalence of intentional and unintentional poisonings?

We think, that though any remedy would be very partial in its effect, still some good might possibly be done by a measure which would not do everything that was expected from it. It was with that view that we amended this Bill, considering that so amended it might effect some good, and that it would be, as far as we know, unobjectionable. Of course we cannot be responsible for what the public might say when printed and circulated in different parts of the country. Other chemists might say that it was even too stringent as altered by us; but in our opinion, as it is, it would be unobjectionable.

167. I think that by this Bill you propose that the members of the Pharmaceutical Society should not be subject even to the restricted regulations which are there enforced?

We have inserted that provision; but of course, if the restrictions were reduced to a very small amount, we should have no objection to be subjected to them. If, on the other hand, the restrictions were retained, it would become necessary that you should exempt a class of persons who understand the business, and who have a great deal of dispensing of medicine. It would be exceedingly inconvenient to them, as well as to the public, for them to be restricted to the extent which was originally proposed in the Bill.

168. *Lord Wensleydale.*] Have you made any inquiry respecting the restrictions which prevail in Prussia, which are very strict indeed, upon the subject of all poisons?

(Mr. *Squire.*) We have, and the restrictions in Prussia are correspondent with the education there. They take great care that men shall undergo a severe examination, and that they shall be duly licensed by the Government.

169. Besides that, they are extremely strict in the custody of poisonous drugs which are to be sold, and there are great restrictions upon the sale of them, besides the better education of the chemist?

That is so, and they have two classes of men there, the first and second class men, and they always give a first-class man the privilege of opening an establishment where they think one desirable.

170. Have you ascertained whether, in consequence of the precautions which they take, both in point of education and in point of the custody of the drugs, and the mode of selling them, few poisonings occur in Prussia or not?

That is the chief guarantee, the generally educated state of the men.

171. And very few poisonings do occur there?
 Very few occur, I believe.

172. Are you not of opinion that the restrictions which are imposed upon the sale of poisons are of very considerable efficacy for that purpose?

No doubt they are. Would it be practicable that your Lordships should
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append to the altered Bill a rider, with regard to registration, if that Bill should meet with approval.

173. Earl of *Derby*.] The registration is not introduced at all in the Bill as you have proposed to amend it?

No. It is a question whether your Lordships like to commence that operation now.

174. *Chairman* (to Mr. *Bell*).] You were proposing to give some information about the labels; the Committee would like to hear what you have to state upon that subject?

I was observing that the same kind of label will not answer for all purposes; some substances, liquids, for example, act upon the labels, and it is necessary to engrave them upon the bottle in this way (*producing a bottle*). According to the Bill, if it passed in its original form, a man would be liable to a penalty for having this engraved label, whereas a paper one would be destroyed almost immediately. The same with regard to bottles containing infusions, which are wanted continually; a tin label is very often used, and in other cases a wooden one painted (*exhibiting the same*). But these are matters of detail which chemists, who understand their business, know without being directed in an Act of Parliament.

175. Lord *Wensleydale*.] The Bill requires the word "poison" to be cast or moulded in raised letters on the glass?

On that subject I have had a communication from Dr. Maclagan, of Edinburgh, who is exceedingly anxious that this provision should not be introduced, as he says that it would affect dispensaries.

176. But it obviates your objection as to the poisonous substance taking off the label?

Yes, it would answer the same purpose. I was remarking that Dr. Maclagan observes that this would interfere with dispensaries where the patients are required to bring the bottle; and, as he says, it would be very hard upon a patient to deprive him of his liniment because his bottle happened not to be a square one. It would also, as I said before, be impossible to oblige persons always to use the right sort of bottle merely for poison; they would use the bottle for any purpose for which they happened to require it. As a triangular bottle was mentioned on the previous occasion, I have brought a specimen here, respecting which I spoke to the proprietor of it, telling him that it was suggested to use triangular bottles for poison; the answer was, "You cannot use mine, it is registered;" and it is for some particular kind of fish sauce. Then square bottles for poisonous substances are also suggested as a safeguard. Now this is a bottle which is used by one of the largest houses in London in dispensing prescriptions for mixtures (*producing a bottle*), and it is graduated so as to divide the mixture into doses. There are various forms of bottle used indiscriminately for every kind of purpose; and consequently it would be an impossibility to restrict the sale of poisonous substances to bottles of any particular kind. Here is one which is used for essence of peppermint, which, according to the definition in the Bill, feels like a poison bottle, inasmuch as the letters are embossed, and it is a square bottle.

177. *Chairman*.] But supposing it conduced to the safety of the public that poison should be sold in peculiarly shaped bottles, would not the interest of patentees and others prevent their continuing to sell their innocent medicines in a bottle which the public would consider to indicate poison?

If it would conduce to the safety of the public, any inconvenience might be submitted to. But in practice we know, that as soon as bottles are done with, they are sent to the old bottle shop, and then they are sold at a very reduced price to the poor, and when the poor require a bottle for any purpose, they are not very particular what shape it is. Consequently, the distinction would be utterly impracticable; after the sale of the poison, the distinction would no longer be observed.—(Mr. *Bird*.) I may observe, that I have been in business for upwards of thirty years, in rather a low locality, and bottles of all kinds are brought dirty and clean. Sometimes we are obliged to investigate the bottle before we put the article into it, or we should do a great deal of mischief, and

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then we label it. I frequently put on two labels, and sometimes three, so that no accident shall happen. People bring any kind of bottle, and such I dare say would be the case with this poison bottle; they would take it to my shop to have some syrup of poppies, or any little innocent thing put in; it would be brought with the word "poison" upon it, and taken home, and it would become a very common bottle, as common as anything could be. A great many articles in the Schedule would exclude my business altogether; they are things that I have sold for years to people, who do not know that they are poisons, but they go out with a proper label.

178. Allusion has been made to an objection which was taken by a physician in Edinburgh with regard to the dispensaries, the rule obliging patients to come with their own bottles. Is it usual in dispensaries to give poison without any medical prescription?

(*Mr. Bell.*) Not without a prescription.

179. In that case, would not the objection entirely fall to the ground under this Bill?

If the bottles were used indiscriminately in dispensaries for medicines taken internally, and for those for external use containing poisons, the distinction would be of no use whatever, because the public would see that the bottles were used indiscriminately.

180. I understood that the objection, as you stated it, coming from the Edinburgh physician, was, that this regulation could not be enforced of selling poison in peculiarly shaped bottles, because the regulations of the dispensary obliged the patient himself to bring his own bottle; I then asked with regard to that, whether the dispensaries gave poisons without a medical prescription. You said that they did not. There being a medical prescription, there is no regulation under this Act applicable?

Then the rule of putting poisonous substances in bottles reputed unsafe would be broken; assuming that the public have been taught by the Act that a square bottle is dangerous, and that a round bottle is safe, the patient goes to the dispensary with a round bottle, he not having a square one, and his lotion is put into it; he has been taught by the Act that anything in a round bottle is safe to drink, and he goes home and drinks his lotion; that would be the effect of that regulation.

181. *Earl of Hardwicke.*] How would you deal with certain medicines which are dispensed frequently where the same medicine is taken internally and used externally?

That would cause another difficulty; tincture of opium, for example, is frequently taken with many other poisonous substances in the form of drops; a small bottle may be ordered, of which 20 drops are taken for a dose; this would be quite as dangerous, if the whole bottleful was swallowed, as any lotion or liniment could possibly be, and yet it does not come under the definition of the Act as a medicine for external use, because it is taken internally.

182. *Chairman.*] Is not your practice rather at variance with your theory in this respect, and do not you put lotions into blue bottles in order to prevent the patients drinking them?

Of certain sizes where it can be done, and more particularly where the application is about the size of a draught; it is in those cases where mistakes are likely to arise; but when you come to pint bottles, and bottles of a large size, the expense of that kind of glass is much greater, and it would be an obstacle to the general use of it.

183. That may be an additional inconvenience, but it has nothing to do with the question of giving erroneous education to the public as to what is safe and what is unsafe. You object to our Bill because it educates people to believe that round bottles are safe; you at the same time serve external lotions in blue bottles, and you educate people to consider that external lotions in white bottles are perfectly safe?

We do not instruct persons that anything in a bottle not blue is safe to drink: what we inculcate is this, that they must read the label in every case; that if they do not they are responsible. For their convenience, where a draught
 and

and a liniment are of the same size, we put the liniment in a blue bottle; but it is for their convenience; we say, "You must read the label, or you are responsible."

Jacob Bell, Esq.
Peter Squire, Esq.
T. N. R. Morson,
Esq.

184. Earl of *Hardwicke*.] Do you not also paste on the outside, "For external use"?

W. L. Bird, Esq.
H. Deane, Esq.

Yes, or "Not to be taken."

12th June 1857.

185. *Chairman*.] For the safety and convenience of the public, you resort to certain external signs, in order to distinguish deleterious from innocent mixtures?

We have endeavoured to do it; we have been for years trying the experiment, and experience has taught us that it is only to a very limited extent that it is of any use.

186. But still sufficiently useful to induce you to continue the practice?

So far as it is practicable, but it is only to a very small extent that it is so; some persons have different methods of making a distinction. Mr. Squire's plan is to distinguish his lotions with green labels.—(Mr. *Deane*.) I should like to suggest what I believe would be the opinion of all present, that there would be no serious objection to a clause preventing young persons under a specified age, say 18, from selling the poisons pointed out in the amended Schedule now handed in.

The Witnesses are directed to withdraw.

Ordered, That this Committee be adjourned till Monday next,
 half-past Three o'clock.



Die Lunæ, 15^o Junii 1857.

LORDS PRESENT:

LORD PRESIDENT.
Duke of SOMERSET.

Marquess of SALISBURY.
Earl of DERBY.

Lord PONSBNBY.

Lord ROSSIE.

Lord WENSLEYDALE.

Lord TALBOT DE MALAHIDE.

THE LORD PRESIDENT in the Chair.

Evidence on the
Sale of Poisons, &c.
Bill.

Mr. JOHN ABRAHAM and Mr. JOHN BAKER EDWARDS, are called in,
and examined as follows:

Mr. J. Abraham
and

Mr. J. B. Edwards.

15th June 1857.

187. *Chairman* (to Mr. Abraham).] WILL you state in what capacity you appear here?

We are deputed by the Liverpool Chemists' Association to state the grounds upon which they have petitioned your Lordships against the Bill on the Sale of Poisons.

188. Are you and Mr. Edwards both chemists?

We are both pharmaceutical chemists.

189. You have probably considered the general practice with regard to the sale of poisons at present?

Yes.

190. Do you consider that that system is one that requires any amendment?

I am not sanguine that legislation can do much towards preventing poisoning; but I am of opinion that if anything can be done, it can only be by restricting the sale of poisons to competent persons, that is, persons of good character, and who understand the nature of drugs and chemicals.

191. Perhaps, in the first instance, you will be good enough to state to the Committee your objections to the different details of the proposed Bill?

I will endeavour to do so; I am of opinion that the Bill has a direct tendency to throw the sale of poisons into the hands of a very low class of shopkeepers, dealers in gingerbread, in fact. I am of opinion that the difficulties imposed by this Bill in the way of obtaining poisons are such as would prevent the most respectable chemists from selling them, except in a few instances; and as any person is by this Bill allowed to sell poisons, I apprehend that poisons would be supplied by the class of tradesmen whom I have mentioned, who would disobey the law, and who would risk any penalties which the law could impose; and I am also of opinion that the Bill would have a direct tendency to increase the quantities sold in other cases to persons of a superior description. The difficulties placed by the Bill in the way of obtaining poisons are such that I think a great many persons would take the first opportunity of providing themselves with a supply. In many cases these parties would keep those dangerous articles without proper care; servants and younger members of the household would have access to them. At present, no respectable person is refused by his chemist any supply which he wishes, and he consequently asks for no more than he requires; but I am of opinion that if this Bill passes, persons will supply themselves with much larger quantities, in order that they may have a supply when needed.

Mr. J. Abraham
and
Mr. J. B. Edwards.
15th June 1857.

192. You are acquainted with the provisions of the Arsenic Bill?
I am.

193. That Bill contains several restrictions upon the sale of arsenic, does not it?

Yes. I think they are very judicious, and I should like, if possible, to enforce the Arsenic Act even further; I have always obeyed it, and have been glad, sometimes, to escape the responsibility of selling arsenic in consequence of the restrictions of that Bill.

194. You do not think that, so far as those regulations go, they have had the effect of driving the sale of poisons into the hands of a lower class of dealers, or have induced the public to take large quantities, more than they want for their own use?

I cannot say that I have any evidence to show that such has been the case, but it would not much surprise me to find that in some cases it has been so, because one regulation of the Arsenic Act, which is also introduced into this Bill, providing that it shall only be sold uncoloured, in large quantities, has a most direct tendency to induce people to take more than they want.

195. Lord *Rossie*.] You say that so far as the Arsenic Bill goes, you think that Act has operated beneficially?

With the exception of the provision that not less than ten pounds is to be sold uncoloured.

196. Are there any other poisons which you think might fairly and properly be brought under the provisions which are contained in the Arsenic Act?

I think there are.

197. Have you a list of those poisons which you think might be legislated for in the same manner as in the Arsenic Bill?

The following are the poisons to which, I think, the provisions of the Arsenic Act might be applied:

Arsenic.
Corrosive sublimate.
The poisonous vegetable alkaloids.
Prussic acid.
Cyanides of potassium, mercury and silver.
Essential oil of bitter almonds.
Belladonna.
Hemlock.
Aconite.
Foxglove.
Savin.

There are very few cases, I apprehend, which would admit of corrosive sublimate being coloured. I am told that chloride of antimony and *coccus Indicus* are used by farmers, and that the latter is also used for ringworm.

198. *Chairman*.] Do you find that corrosive sublimate is a substance which is often used noxiously?

No, not much; it is asked for for the purpose of destroying caterpillars and vermin.

199. It is a most deadly poison, is it not?
Exceedingly; it is a thing that I have very seldom sold.

200. From no demand having been made for it?
Yes.

201. Duke of *Somerset*.] Is it not used in any trade?

It is; but it has not happened that I have been frequently asked for it for any purposes of business, though it is important in some branches of business.

202. Marquess of *Salisbury*.] When persons use it in trade, they would probably purchase it wholesale?

I rather think not, but I cannot speak upon the point with confidence.

203. Lord

203. Lord *Rossie*.] Are there any other poisons which you think might be included? Mr. J. Abraham
and
Mr. J. B. Edwards.

I think the essential oil of bitter almonds ought not to be sold undiluted, because the only purpose for which it is required is either as a perfume, or for flavouring articles of cookery; and in either case it might, without much disadvantage, be mixed. 15th June 1857.

204. Will you follow the list contained in the schedule, and state your opinion with reference to the several articles mentioned in it?

The poisonous vegetable alkaloids I should think it very wrong to sell without good reasons; I do not know many occasions on which I have occasion to sell vegetable alkaloids unmixed.

205. What have you to say about prussic acid?

Prussic acid I have never sold unmixed, except in a very few instances, in which I have sold it to destroy dogs and cats. Cyanide of potassium is not an article much in demand with me; that of mercury and of silver not at all. Chloride of zinc is most extensively in demand, in the form of Burnett's disinfecting solution. I have known of one fatal case from its use: a bottle of it was standing upon a lady's dressing-table, and she took it up instead of a bottle of Dinneford's solution of magnesia, and she died from the effects of it.

206. *Chairman*.] Was that prepared according to Sir William Burnett's recipe?

It is prepared in his name, and, I presume, under his direction. It is a very strong solution of chloride of zinc, and is a valuable disinfectant: it is ordered to be taken out in large quantities in all emigrant ships, and in many other ships also.

207. Duke of *Somerset*.] Is it an article upon the sale of which you would put a restriction?

I do not know that that could be done without preventing its useful and very important application.

208. Lord *Rossie*.] You are aware that all persons using it in trade are exempted if they can get it?

Yes; but it is required by private persons to remove odours; it is also used constantly in sick rooms; it is supposed to be disinfectant.

209. Marquess of *Salisbury*.] You said that it was taken out in emigrant ships?

It is, in large quantities.

210. And in other vessels also?

I believe that every vessel fitted up under the Merchant Seamen's Act carries a considerable quantity of it. Then the next article in the schedule is chloride of antimony: I do not think that that is an article of much use, except to veterinary surgeons. At the same time it is an article in common demand for the purpose of mixing with oil to clean furniture; I really do not know that it is of any value for that purpose; and I should think it no hardship to prohibit its use for such purpose if any advantage were to be gained. I never knew it taken as a poison, either accidentally or otherwise.

211. Duke of *Somerset*.] You would propose that the sale of chloride of antimony should be restricted?

I do not know any reason for it, because I never knew an accident happen from the sale of it, and therefore I think it is useless attempting to restrict it. If I am not correctly informed, I see no hardship in restricting its sale. With respect to cantharides, I can only say, that I never sold cantharides themselves, except to the trade, and I do not think that it is an article that should be sold. I see no objection to a restriction upon its sale.

212. Marquess of *Salisbury*.] Is not it used very largely by veterinary surgeons?

Yes, for the purpose of blistering; that use does not come within the provisions of the Act; it is excepted; but with respect to the tincture of cantharides, it is in constant demand for hair-washes; it is a useful application with other substances for preventing the falling off of the hair.

Mr. J. Abraham

and

Mr. J. B. Edwards.

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213. *Chairman.*] Is it poisonous in that form?

I never knew it mixed in such a quantity as to be dangerous; I never knew any accident arise from its use in such a form. Belladonna and its preparations are not in popular demand. I think I never use them, except in prescriptions, though belladonna has the property of dilating the pupil; and I think I have known a case in which a person was accustomed to use it, but doubtless he had a prescription for it originally. I do not think that there would be any hardship in imposing a restriction with regard to the sale of it; but I do not remember any case of poisoning by its purchase which would be affected by this Bill.

214. *Lord Rossie.*] What do you say with regard to hemlock?

Hemlock is a thing that we never sell. I think druggists never sell it. We buy it to make preparations.

215. *Duke of Somerset.*] You say that there is no objection to restricting the sale of belladonna, and no objection to restricting the sale of hemlock; but is there any objection, in your opinion, to restricting the sale of preparations from belladonna, and the sale of preparations from hemlock?

I do not know that any public inconvenience would be caused by restricting their sale; but, at the same time, I have said before that I doubt whether any benefit would be derived from so doing. I stated at the outset, that I believe the good qualifications of the vendor to be the most important point, and the only one towards which legislation can do anything.

216. Would this Bill have the effect which you said would result from it, namely, to throw the sale of these poisons into the hands of a low class of dealers?

My observation on that point applies principally to opium and its preparations; but the general tendency of the Bill, I think, also, is of that character.

217. *Lord Rossie.*] Will you take the next article, aconite; would you say the same as to that that you do with regard to hemlock?

Aconite is a very dangerous substance; but it is not in popular demand. The aconitine, which is made from it, is very frequently asked for in the form of ointment; and we certainly hope to be at liberty to supply that.

218. What is your opinion with regard to opium?

Opium is very largely in demand, principally in the forms of laudanum and of paregoric. Its sales are exceedingly numerous in many shops, and in very small quantities.

219. *Lord Wensleydale.*] Is it not also sold in the country very much, in the form of opium?

I believe so; but not with me.

220. *Lord Rossie.*] That is, in a simple form, not in preparation. You think a restriction upon that would be attended with inconvenience?

I am afraid that it might; though it would not be so in the case of persons who are in the habit of coming to me.

221. You would exclude simple opium from any restriction?

I cannot offer a very confident opinion upon that point.

222. *Duke of Somerset.*] What you stated with regard to opium was this, that if opium was put into the Act, it would tend to throw the sale of opium into the hands of a low class of dealers?

I spoke of opium and its preparations, more particularly laudanum and paregoric.

223. Those would be sold by a low class of dealers more largely than by respectable chemists?

I think so, because the demands are in small quantities; in pennyworths and two-pennyworths, by the poor, and those parties could not obtain a certificate; neighbouring shopkeepers of a low class would find that it suited their purpose to keep those articles for their customers, and to supply them in evasion of the law.

224. Then

224. Then that would increase the danger that now arises from the sale of opium?

*Mr. J. Abraham
and
Mr. J. B. Edwards.*

I think so, very much.

225. You stated that another effect would be, that people would keep stores of poisons; did that answer apply to such a thing as opium?

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Yes, and to all others, if there be any in popular use.

226. You stated that the effect of the Bill would be to make people keep stores of those poisons where now they only keep a small quantity?

Yes.

227. *Chairman.*] What do you believe to be the general use to which small doses of laudanum are applied; is it for medicinal purposes?

In many cases it is, and I have no doubt that in many it is very much abused; and if you could prevent a particular class of sales, I think it might be a good thing, but I am afraid that it cannot be done.

228. What class of sales do you refer to?

I believe that there are a large class of purchases for the purpose of administration to children, and as a stimulant to adults.

229. *Lord Rossie.*] You mean as a dram?

Yes.

230. *Lord Wensleydale.*] And to mix with beer?

I am not aware of that.

231. *Lord Rossie.*] Are there any articles included in the schedule to which you would make an exception; do you think that the restriction upon the pure preparation sold would not be so objectionable as opium?

Neither the powder nor the extract of opium are in popular demand, except that people have private formulæ containing those articles which they bring to be made up; I think it would be a great hardship if we could not make up a family recipe containing some of those things.

232. My question applied to those without their preparations, beginning at foxglove down to the end; would there be any hardship in putting a restriction upon the sale of those articles purely, without being in a state of preparation?

Yes. Stramonium is not dangerous; I believe it is not so poisonous as tobacco, and it is in demand for smoking to relieve asthma. Chloroform in small quantities is in constant demand to relieve pain. A considerable quantity is sold, and it is generally sold in small quantities.

233. *Earl of Derby.*] And it is sold not upon the recommendation of any medical man?

Yes; it is asked for popularly. I believe it is quite a mistake to suppose that anybody has ever been robbed by the application of chloroform to produce insensibility. I do not believe it is possible, unless you could take a person and hold him, and apply the chloroform for some time to the nostrils or mouth, to produce any insensibility by means of chloroform.

234. *Lord Wensleydale.*] The general opinion is very different, because the Legislature has actually made it penal to use chloroform for the purpose of producing stupor in order to commit robbery. It was understood at the time the Act was passed that there were a great many instances of the sort?

Yes; it is quite possible it might be done where one or two persons combined to overcome another, and administered chloroform to produce insensibility; in that case they might do what they pleased with the person. I have heard it said that cases have been reported in the newspapers, in which chloroform was said to be administered to persons on the highway in order to rob them. I am not aware that those statements have ever been authenticated; and I do not believe that any person could be robbed in that manner.

235. *Chairman.*] What do you say with regard to oxalic acid and binoxalate of potash?

Oxalic acid is in demand for bleaching purposes, both for boot-tops and also in the making of straw bonnets, though I have not much personal knowledge of it; it is an article in constant demand to remove stains.

Mr. J. Abraham
and
Mr. J. B. Edwards.

236. Lord *Wensleydale*.] Chloroform, in a limited quantity, might safely be sold; it is generally sold for the tooth-ache in small bottles?

I think it might.

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237. Not a sufficient quantity to steep a handkerchief, and stop a man's nostrils?

A small quantity, if applied effectually, would produce insensibility.

238. Earl of *Derby*.] You could sell no quantity which, if intended to be used, would not be dangerous to life if improperly used?

We could scarcely sell any quantity that would be useful that might not be abused, but it would not be dangerous to life. Persons have been kept in a state of insensibility by chloroform for 24 hours without (according to one of our highest authorities) being in any degree the worse for it.

239. Lord *Wensleydale*.] You could not sell safely even that small quantity which is contained in an ordinary chloroform bottle, which is obtained at the chemists for the purpose of assuaging the tooth-ache?

I am afraid not; because when chloroform has been carefully administered, it has been found that a very small quantity will produce insensibility.

240. *Chairman*.] What is your opinion with regard to nux vomica seeds and bark?

I think nux vomica is one of the safest things that you can give to destroy mice; it is a brown powder. There is no danger of its being taken by accident. It could not be administered feloniously to produce poisoning; it would require a considerable quantity. I have known it frequently administered in medicinal doses of 20 grains. It is very bitter, and if given to any person, he would be sensible of it. I much prefer giving it to any person who wants to destroy mice to selling arsenic, and I think putting a restriction upon its sale has a direct tendency to encourage the sale of arsenic.

241. What is your opinion with regard to tartarised antimony?

Tartarised antimony itself is not in popular demand, but it is sometimes wanted to produce immediate vomiting in cases of poisoning. Its solution is the well-known antimonial wine, which is constantly used as an emetic; I never knew it used either suicidally or homicidally, and I do not think that anything is to be gained by prohibiting the sale of the solution of tartar emetic.

242. The next article is *cocculus indicus*?

I know nothing about *cocculus indicus*. I have no practical knowledge of its application; I know of no use to which it can be put. I think that if the Legislature were to prohibit its importation altogether it might very likely be a good thing; but I never knew it used either for the purpose of suicidal or homicidal poisoning. I should be very glad if it could be prevented reaching the brewer's hands.

243. The next article is ergot of rye?

I never knew ergot of rye used for any felonious purpose; but I cannot say whether it has been given to produce abortion.

244. Savin is frequently used also to produce abortion?

I think it is; I think no person should sell savin without careful inquiry; I do not know that I ever sold any.

245. Do you consider lobelia a poison?

Decidedly; but in some parts of Lancashire it has been extensively recommended, I think by Dr. Coffin; and I believe that several cases of poisoning have occurred by its use; but many persons have great faith in its virtues, and it is used to relieve asthma both popularly and professionally; it is an exceedingly acrid thing; there is no danger of its being used feloniously. Then, with respect to the prohibition of selling any substances containing any of those things, I think it would be excessively inconvenient; and I ought, I think, to point out that there are many most dangerous poisons which are not included in the schedule to this Bill, some of them more dangerous by far than many which are contained in the schedule. For instance, the preparations of lead, sugar of lead, white lead, and other articles which it is scarcely possible to keep out of the hands of the public.

246. The

246. The first particular provision of the Bill to which the Petition of those whom you represent applies is the 4th clause of the Bill; will you state what your objections are to that clause?

Mr. J. Abraham
and
Mr. J. B. Edwards.

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My objection to that clause is partly in connexion with the severe penalties imposed by the Act, because I presume your Lordships intend that this Act should apply to a sale made by an assistant; now if my assistant were to violate this Act you would consider me responsible, and it is proper that I should be fined for it; and if another assistant, some years afterwards, perhaps in violation of my most positive orders, were again to commit a breach of the Act, I should not only be fined, but be totally disabled from carrying on my business. Now I am of opinion, that if additions and alterations in respect to the schedule of this Act are to be frequent, it will scarcely be possible that all the chemists in the country can be acquainted with them; and, in consequence, many persons will unwittingly offend against the Act. Therefore I do think, that the most solemn and the most effectual means ought to be adopted to make known the names of those prohibited articles, and the most deliberate consideration should be given to any additions to them.

247. Lord *Rossie*.] Do you think if an Order in Council was given with the approval of the Royal College of Physicians, it would be an advantage?

Yes.

248. Duke of *Somerset*.] Your objection is, that you will not only have to study the law, but to read all the Gazettes, in order to see what articles are included in the law?

Yes, that is one objection.

249. And a further objection is, that that provision in the first part of the clause is accompanied in the latter part with a heavy penalty in case you omit to do it?

Yes; and besides, there is no provision here that the parties interested shall have an opportunity of being heard before the Privy Council before matters so materially affecting them are introduced. I would say, that the Pharmaceutical Society are a far better body, and far more competent to advise the Privy Council than the College of Physicians.

250. Lord *Rossie*.] Your last objection would be obviated if there were a responsible body on whose advice the Secretary of State would act?

Yes.

251. *Chairman*.] You object to the 5th and 6th clauses of the Bill?

Yes, upon the general ground that if you throw difficulties in the way of obtaining what is extensively in demand, the provisions of the law will be violated by persons of the lowest grade; because, as our Petition mentions to your Lordships, any person may take up the business of a chemist and druggist; and I have been informed (though I am very much surprised to hear it, and I do not know that it is true) that drugs are so commonly sold, that in Leeds there are no less than 1,700 persons who sell drugs; I cannot vouch for the fact, though Dr. Edwards, who is by me, informed me that he had so learned.

252. Duke of *Somerset*.] You approve of the Act as regards arsenic?

Yes, with the exception of the provision with respect to the quantity sold uncoloured.

253. I think the Arsenic Act has a provision, that no person shall sell arsenic to any person who is unknown to the person selling it?

Yes; I do not object to that.

254. Should you object to extending that provision, which now applies to arsenic, equally to any other poisons?

I should have very little objection to it.

255. Do you think there would be any use in it?

I think that to a few of the articles in the schedule, such a provision might be very well applied; for instance, to corrosive sublimate, prussic acid, cyanides of potassium and chloroform even, if there be any foundation for what has been said; but I do not think there is; and it might be applied to a few others.

Mr. J. Abraham
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256. Lord *Wensleydale*.] To chlorides of zinc and antimony?

Not with respect to zinc; and I think chloride of antimony a very unimportant thing.—(Mr. *Edwards*.) The experiences of every trader in those substances will differ considerably according to his own experience. My own business is of the nature of an operative chemist, in which business I supply more substances to artists, and to artisans and to manufacturers, and for certain peculiar purposes in art than is the case with Mr. Abraham, who represents a dispensing business. I have also had a little experience in the country, and I am a lecturer on chemistry and medical jurisprudence; and my attention has been particularly called to poison in connexion with poisoning cases, upon which I have been consulted by the Crown.

257. *Chairman*.] Have you any difference of opinion with Mr. Abraham upon the 5th and 6th clauses?

I think the 5th clause should bear reference to the qualification of the vendor.

258. In what way?

That no person should be allowed to sell poisons under those restrictions unless he possesses some qualification. I think that the open sale of poisons by unqualified persons is most injurious to the public.

259. Earl of *Derby*.] Do you differ from Mr. Abraham with regard to what he stated, as to applying the same restriction to some poisons which now exist in respect to arsenic?

I quite agree with it if applied to the class of qualified vendors.—(Mr. *Abraham*.) I may observe that Dr. Edwards seems to have forgotten that the Act does not apply to the sales to artisans, which Dr. Edwards referred to.

260. *Chairman*.] In clause 11 there is an exemption of all articles supplied to persons carrying on certain businesses?

(Mr. *Edwards*.) Yes.

261. (To Mr. *Abraham*.) Will you proceed to state your objections to the 7th, 8th and 9th clauses of the Bill?

My objection to those clauses arises from the conviction that they would not be applied universally, and also that bottles intended for poisonous substances would get into the hands of various persons who would use them for other purposes, and they would become accustomed to disregard any warning of that kind. I think that a distinct provision, that all poisons should be properly labelled, and, if you like, that some mark, such as a skull with cross-bones, or something of that kind, should always be affixed, which could be recognized by the most ignorant, and which could be removed when the bottle was used for any other purpose, would be much more effectual.

262. Duke of *Somerset*.] Do you mean that every article in a chemist's shop that is poisonous should have these cross-bones upon it?

No, I was speaking of the articles as sold to the public. I meant that the packets in which those articles were put up should be so marked.

263. Then the articles would be kept in the chemist's shop in whatever bottles he pleased?

I believe you will do best by leaving chemists to preserve their articles in the way they find best, because they have a very strong interest indeed in doing their utmost to prevent mistakes; but I may say, that I have put the word "Poison" upon various bottles in my shop, which I hope does afford a useful warning, though I have not much reliance upon such precautions. I think if you employ unqualified or careless persons who have to deal with, mix and sell poisons, you will have death following.

264. Do you think that the practice which is applied to arsenic, of colouring the arsenic, might be advantageously applied to other poisons?

To none that I know of; and I am rather under the impression that the colouring of some with archil would be very dangerous; that it would give a resemblance to certain medicines which are in constant use; but I cannot speak very confidently upon that point, though I have a very strong impression upon it.

265. Your

265. Your impression is, that clause 9, which enforces the employment of archil as a colouring matter, would add to the danger, rather than diminish it?

In the very few cases in which it could be used at all. I believe, generally, that it could not be used at all without destroying the character of the articles.

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266. Your answer also applies to any separate cupboard in a chemist's shop for the preservation of poisons; you do not think that any precaution of that kind could be enforced by law with advantage?

I am afraid not; but I am sure that if it could be done, it would be done: chemists would be very glad to adopt it. And with respect to the forms of the bottles, I may mention an accident which occurred the other day in Liverpool. If the clause in this Bill which applies only to the bottles in which poisons are delivered to the public, had applied to the bottles in which the articles are kept for the purposes of dispensing, it might have saved the life of a patient. For instance, a youth making up a prescription containing sugar, took up by mistake a bottle containing * * * which is also a white powder, which was standing on the counter. If that dangerous article had been put in a bottle of a peculiar shape, it is very possible that that youth might have been guarded from that mistake. But I really do not think that it is necessary for the Legislature to make any enactment upon the subject, because the injury to a chemist's business by the occurrence of such a thing as poisoning an individual is so great, that if there really be any reason to suppose that it would protect them from accident, they would be most glad to adopt it.

267. Lord Rossie.] Your opinion is, that if that bottle in which that substance was contained had had a peculiar mark upon it, that mistake could not have occurred?

I think so.

268. Should you see any objections to chemists keeping poisons in a peculiar shaped bottle, different from the bottles in which other articles are contained?

I have known it done, and I believe it is still done by one house in London; but I cannot say that upon the whole I think it so good as the mere putting the label "Poison" over the name of the article; for this reason, a chemist is continually receiving additional fresh poisonous articles, both new articles, and also additions to his stock, which it might not always be convenient to put in a bottle of the proper shape; but it is very easy indeed for him, if he has a stock of printed labels, with the word "Poison" on them, to put one of those labels on the bottle.

269. While you think that as regards the public, any particular shaped bottle or any little distinctive mark would be a disadvantage, there would be no real difficulty in chemists having it?

I explained that I thought so, because I was afraid that it would not always be applied. I think that the lower class of dealers would sometimes deviate from it, and that a false security would in that way be generated; and I also mentioned that I thought the public having such bottles would use them for other purposes.

270. Chairman (to Mr. Edwards).] Do you agree or do you disagree with the views put forth by Mr. Abraham upon those clauses with regard to the bottles?

I consider that the provisions of the Bill would be extremely troublesome, and would give rise to mistakes. I think that in the case to which Mr. Abraham referred, there is nothing contained in this Bill which would have protected the chemist, and I think it is an illustration that even the arrangement proposed of keeping the poisons in a separate closet from the rest of the simpler drugs would not necessarily protect a dispenser from making such a mistake; for the circumstances of that case were these: a young man in the midst of making up a prescription containing sugar, left off in order to prepare a prescription containing * * *. He left the bottles upon the counter, finished off his prescription, sent it out to the public, and came back finding these bottles upon the counter waiting for him. He then used the * * * a second time, and put it into the medicine instead of the sugar. Now wherever he had

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fetched those bottles from, he brought them to the same place to do his work; and the fact that they were upon the counter together would have occurred, even if they had been kept originally in separate compartments.

271. Earl of *Derby*.] Would not that mistake have been altogether prevented, either by having the bottles labelled or having them of a particular shape?

I think that the young man was very culpable in using the bottle, a label of which he did not read. There was a label on each bottle.

272. Lord *Wensleydale*.] That observation of yours arises from the little security that there would be in keeping them in a separate place?

Yes.

273. It does not affect the security as regards the shape and colour of the bottle?

No.

274. Lord *Talbot de Malahide*.] Supposing that very dangerous poisons were put into a particular shaped bottle, might not that serve as a guard to those who could not read?

I think that the very dangerous class of poisons are not those which go into the hands of the most ignorant, such as prussic acid, or oil of bitter almonds; they are not sold to persons who cannot read; and under any circumstances I doubt if it is right to sell these poisons to that class of people.

275. *Chairman*.] Are you aware that the substance which is most used, both in intentional and unintentional poisoning, is laudanum?

Probably it is.

276. That is used by every class of dealer, is it not?

It is; and not only so, but, as Mr. Abraham has observed, it gets into the hands of a class of persons who simply wish to accommodate their customers; and in Liverpool a good deal has been sold by publicans, especially during the cholera season; and during the fruit season in the summer, it is the custom for the publicans to keep a supply of laudanum to add to the brandy; and were a great restriction placed upon chemists, the trade for laudanum would go into the hands of the publicans, and the trade for chloroform also; and I think that you would not have the same protection in that case as in the case of a respectable class of people.

277. Lord *Wensleydale*.] They would all be liable to be punished if it were contrary to the Act of Parliament?

Yes; but it would be very difficult to prove it.

278. Lord *Rossie*.] Is it difficult to get assistants duly qualified in your business?

There are a large number of young men who are qualified, but who have not passed the examinations of the Pharmaceutical Society. There is no guarantee of their qualification except such as the employer himself ascertains when he engages such assistants. The large mass are sufficiently qualified, I believe.

279. Earl of *Derby*.] An apprentice is wholly ignorant of his business when first engaged, is not he?

He is.

280. What security is there against the sale of dangerous poisons by the carelessness of an apprentice?

The intelligence and education of the master himself. If he is intelligent, and if he really desires to do right by his apprentice, he will only put him to such duties as he can execute with safety to the public; and it is only in those cases where apprentices are taken by small shopkeepers who are obliged to use their services in order to dispense drugs for economy, instead of by assistants, that they are put to dispense strong drugs; in other cases they are not allowed.

281. Lord *Rossie*.] Do you think it would be possible to confine the sale of poisons to educated chemists?

There is a certain class of poisons which the public are acquainted with, and which, therefore, are dangerous to be freely dispensed. I think that a schedule might be very usefully adopted, including certain articles, the sale of which should be confined to qualified pharmaceutical chemists.

282. Duke

282. Duke of *Somerset*.] Would you be prepared to put opium, and its preparations, into such a schedule?

I should not, at present.

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283. Then that poison which is used most, both intentionally and unintentionally, for the purpose of poisoning, would still go on being used totally unprotected by the Bill as you would have it?

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I believe that the sale of opium can only be restricted with respect to the qualification of the vendors; and I would not allow opium to be sold by any persons under any circumstances not possessing the requisite qualification.

284. Lord *Rossie*.] Would you confine the sale of opium solely to persons having that requisite qualification?

I would ultimately.

285. Are there a sufficient number of persons now to fulfil that condition in the different villages and towns in England?

I think it would require time to legislate upon that particular point.

286. Duke of *Somerset*.] Would it not throw the sale into the hands of a low class of dealers if you tried to make such a regulation as that; would not opium be sold, as it is sold now, by a low class of dealers throughout the villages in the country in defiance of the law?

That is the case at present; I believe such a law as this now proposed could only be carried out by proper informations by a public prosecutor of some kind. I believe the Arsenic Act is frequently ignored. There was an instance which occurred at Bolton, where white arsenic was sold. Dr. Taylor has just mentioned a case in which arsenic had been obtained by a gentleman for the purpose of suicide, and of course it depends upon the mode in which the Act is enforced as to whether it becomes a very useful Act or otherwise to the public.

287. What would be the effect of a law as to poisoning, which at once said that no man, except an educated chemist, should sell opium or any of its preparations?

In the present state of the country, I believe it would be ignored.

288. Then it would be useless?

It would.

289. Marquess of *Salisbury*.] Do you differ with Mr. Abraham in supposing that restricting the trade would occasion large quantities of poison to be purchased at a time?

I quite agree with him upon that subject.

290. Lord *Talbot de Malahide*.] As I understand you, your proposition, with reference to the sale of opium, forms part of a system that you would recommend for generally putting the sale of all drugs upon a different footing; that is, confining it to parties who have passed an examination, and shown that they were capable of being entrusted with the dispensing of them?

Yes, it is so.—(Mr. *Abraham*.) I wish to observe, that there is a largely-increasing number of qualified persons practising pharmacy, both as principals and as assistants. Very great efforts have been made by the profession generally, through the Pharmaceutical Society, to improve the education both of their own members and of succeeding pharmacutists, and with very considerable success; and with respect to any legal enactments restricting the sale of poisons to qualified persons, I cannot see that it would have any tendency to throw the sale into the hands of an ignorant class of dealers; and I do not think it would be ignored, unless you made it excessively difficult for qualified persons to supply the article. If the public can get what they want from a qualified person, they have no inducement to go to an unqualified person; but if they cannot get it from a qualified person, they will then go to persons who will evade the law.

291. *Chairman*.] Therefore, the result would be, that in large towns they would apply to pharmaceutical chemists, and in the country they would go to general dealers?

I should say that there are many highly respectable chemists and druggists who, I am sorry to say, are not members of the Pharmaceutical Society; but

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I believe it is the fact, that the Pharmaceutical Society represents the great body of respectable chemists and druggists in the kingdom.

292. You do not object to a highly-qualified country chemist, whether he belongs to the Pharmaceutical Society or not?

No; but if he is a person of good character, I think you might safely trust him with the sale of poisons which are in demand.

293. Lord *Rossie*.] How is that to be ascertained?

I think you might very safely leave the Pharmaceutical Society to make some kind of examination into the qualification of individuals, and to authorise them (provided they obtained a certificate of character from some local authority) to sell poisons.

294. Duke of *Somerset*.] You would not in any way increase the difficulty of the public getting at such a poison as opium?

Not beyond the provisions of the Arsenic Act. I think that Act was well conceived, and imposes no hardship, with the one exception which I before mentioned.

295. *Chairman*.] You think the penalties imposed in this Bill are of too severe a character?

I do indeed, if the principal is to be responsible for the acts of his assistant; and I think that the principal ought to be responsible for the acts of his assistant.

296. Lord *Ponsonby*.] Would it not be difficult to prove in a chemist's shop who had made up a particular compound?

I think it might. I think the Act ought to apply to the principal; but in that case, I think the penalties should be sufficiently severe, but not ruinous; because the best-intentioned might, by the folly or wickedness of another, be subjected to them.

297. Earl of *Derby*.] You would not object to make the principal criminally responsible for the conduct of his assistants, so far as regards the imposition of a moderate fine as a penalty upon the offence?

I would not.

298. Probably you would not object to increasing the amount of that fine upon a second or third conviction for the same offence?

No; I think he ought to suffer more the second time.

299. Lord *Rossie*.] The provision which you object to principally is being disqualified from carrying on business?

Yes; and I think the penalty is very high too—it is 50 *l.*; for a second offence might really be but a trifling thing; although I should endeavour to obey precisely any enactment.

300. *Chairman*.] In your Petition, lastly, you represent that many of the articles in Schedule A. are in daily demand for useful and domestic purposes, and so on, and that to restrict the sale of such would impose a serious inconvenience upon the public, without defeating the objects of the criminal?

Yes; and I may state how I come to that conclusion. There are in the Liverpool Directory about 210 chemists and druggists: there are 217 names; but perhaps some of them are duplicates. Now I calculate, that if each of them sell on an average 25 articles coming within the provisions of this Act, and there are 310 working days in the year, you would have upwards of two million sales in a year. Now I hold in my hand a return of the deaths from poisoning during the last five years, in the borough of Liverpool; this is in the handwriting of the medical officer of health for the borough, who has sent it to me. I find that the total numbers of persons poisoned there during the last five years were 34; of those 15 were suicidal; the remaining 19 were cases either of accidental or homicidal poisoning; I do not know in what proportion they may be. You will perceive, therefore, that out of a sale which is estimated at upwards of two millions annually, there were only four cases annually of non-suicidal poisoning which ended fatally, rather less. In 1852 there were four; in 1853 there were four; in 1854 there were four; in 1855 there were four; in 1856 there were three. There is a remarkable equality in the numbers; but I should observe that the medical officer of health adds; "In addition to the above, four

four inquests were held in the years 1855 and 1856, in which verdicts of 'chance medley' were returned; some or all these may have been cases of poisoning;" Dr. Duncan does not inform me whether they were or not, but does not materially increase the numbers.

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301. (To Mr. *Edwards*.) Have you any information to offer which has not been given by Mr. Abraham?

I think, in clause 11, a farmer should be included in the class of tradesmen to be entitled to obtain those poisons, such as arsenic, for the purposes of their trade, without being limited to purchase particular quantities. Several accidents have arisen from the fact of farmers storing their poisons through getting more than they required; and I think, also, that there is now another class of persons who ought to be enabled to get some of the substances included in the present schedule, if you retain the words, "and its compounds," "and its preparations," to a large number of those poisons. In that case, I think the class of students who are pursuing branches of study in science and art should have some consideration; there are a large number of young men who are informing themselves upon chemical subjects, and entering into studies, who cannot come under the class of tradespeople, but who would be materially hampered in their education by such provisions as this Bill contains: amateurs in photography and electro-metallurgy, for example.

302. Supposing the certificate which would enable them to obtain it was limited to the signature of one householder, do you think it would be a hardship upon those young men to go through that form instead of going to a clergyman?

Then the objection would not be very urgent; but I should object very strongly, upon other grounds, to the use of the words "and its compounds," "and its preparations." I should strongly urge for your consideration, that every article which it is intended to name as a poison should be specified, as very much injury to the public would result from the exclusion of preparations which contain only very minute proportions of the poison.

303. Lord *Wensleydale*.] And not dangerous proportions?

Not dangerous proportions; and in a number of cases of poisoning which have come under my own examination, I do not know of one within the last 12 months which the provisions of this Bill would have met in every respect, so as to have prevented the poisoning.

304. *Chairman*.] Do you think that there is any objection as to Schedule A. under the third head, "the poisonous vegetable alkaloids," instead of specifying them; do you not think there is some convenience in not informing the public as to the particular descriptions of vegetable alkaloids?

I have no objection to that.—(Mr. *Abraham*.) Our Petition urges that clause 11 should state, that all sales for the purposes of business should be excepted; there are certain trades that are excepted by name; but there may be other occasions in which those things are wanted for trade purposes, which either now do exist or may exist, and it is not desirable to impose useless and burthensome restrictions. The following is the schedule I should propose:—

Arsenic or arsenious acid.
Corrosive sublimate.
The poisonous vegetable alkaloids.
Prussic acid.
Essential oil of bitter almonds.
Cantharides.
Nux vomica seeds.
Cocculus indicus.

The Witnesses are directed to withdraw.

Ordered, That this Committee be adjourned till To-morrow,
Two o'clock.

Die Martis, 16^o Junii 1857.

LORDS PRESENT:

Duke of SOMERSET.
Earl of HARDWICKE.
Lord SOMERHILL.

Lord ROSSIE.
Lord WENSLEYDALE.
Lord TALBOT DE MALAHIDE.

THE DUKE OF SOMERSET in the Chair.

Evidence on the
Sale of Poisons,
&c. Bill.

WILLIAM HERAPATH, Esquire, called in, and examined as follows:

W. Herapath, Esq.

16th June 1857.

306. *Chairman.*] HAVE you seen the Bill that is before the House of Lords with respect to the Sale of Poisons?

I have.

307. Will you state in the first place, as you have had great experience upon the subject to which this Bills refers, whether you think that any legislation is desirable at the present time with reference to this subject?

In the first place, I must say I do not think that the benefits have been derived which we expected from the restriction upon the sale of arsenic.

308. Do you think that the Act, with regard to the sale of arsenic, has not been beneficial to the public?

I believe this, that although the poisoning from arsenic has been lessened, it has had the effect of driving the secret poisoner into other poisons which are more difficult to detect, and that the result has been that there has not been a smaller number that have died from poison than before the restrictions.

309. But as far as regards arsenic, you think that the Act has, to a considerable extent, prevented arsenic from being used for the purpose of poisoning?

I believe it has; it has lessened the number of poisonings by arsenic; but it has thrown the secret poisoner upon vegetable poisons and other poisons more difficult to detect. I have found more cases of what is usually sold as rat and mouse poison.

310. *Chairman.*] Having found that the legislation, as regards arsenic, has not been, in your opinion, altogether successful, do you think it desirable that any other Act should be passed, or that any other mode of legislation should be adopted, with a view to diminish either intentional or unintentional poisoning?

I conceive that if a measure is introduced it must have three objects in view; first, secret poisoning; secondly, suicide; thirdly, chance medley. Now I do not believe that any one system can be introduced to check the whole of these. As to suicide, I think it will be totally impossible, under any circumstances, to prevent it.

311. You think we cannot expect to diminish suicide where a person intends to commit suicide by these means?

I think not; if he cannot have recourse to one mode of destroying his life, he will to another.

312. Then, as to intentional poisoning, what is your opinion?

As to intentional poisoning, I think that something might be done by a system of registration in a book, in which there should be columns for the signatures of the seller and the buyer. If that was properly acted up to, it would be serviceable in one point of view; it would identify the purchaser;

(37. 4.)

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because,

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because, even if the purchaser cannot write, still it will give so much time to the seller to observe the individual, that he will be very likely to recognise him afterwards; and even if he only makes his mark, he will take some time to do so, and the seller will observe the mode in which he makes it.

313. In any legislation that is made upon the subject, it will be necessary, in the first place, to consider what articles shall be subject to legislation; therefore, the first question relates to the matter which appears last in this Bill, but which is first named in it, namely, a "definition of poison," the definition given in this Bill depending upon the articles in the schedule. Have you looked at that schedule?

I have, and I do not think it will be possible to include anything like such a number of articles as are included in this Bill; I think it should be confined to those which may be used for secret poisoning; those which are tasteless, or which are not to be recognised by the victim, those are a small number. The great difficulty I fear is, with respect to opium, which, I fear, we could not restrict practically. That is one of the most common substances resorted to by secret poisoners. The greatest extent of schedule I would propose, is as follows:

Arsenic	-	-	-	-	} Secret poisoning.
Fowler's solution of arsenic	-	-	-	-	
Prussic acid	-	-	-	-	
Strychnia	-	-	-	-	
Nux vomica	-	-	-	-	
Cocculus indicus	-	-	-	-	Hocussing.
Ergot of rye	-	-	-	-	} Abortion.
Oil of savin	-	-	-	-	

314. You heard the evidence given yesterday with regard to opium?
 I did.

315. Will you state the reasons why you think we could not legislate as regards opium?

I think it was shown yesterday that the vast number of things introduced into this schedule would embrace half, or at least a very large proportion, of the articles to be sold in a druggist's shop; I think it would be impracticable to introduce such a number into the Act, because if they were enumerated, still in practice it could not be carried out, for this reason; although I am not a druggist or a medical man, of course I know the mode in which they dispense their medicines, and I know that mankind are not inclined to take too much trouble, and I know that dispensers would not have two sets of weights and scales; and the practical effect of it would be, that if they had those things kept in a separate place, they would be brought when wanted to the place where the chemist was dispensing, and there would still be the chance of his taking up one bottle in place of another; he never would take his medicine, partially prepared, away from one part of his shop to another to complete it, and bring it back again.

316. In the first place, will you state what articles you think we might reach by legislation; you say that arsenic is one?

That is one; that is an article which may be taken without the victim being aware of it. Corrosive sublimate is so horridly nauseous to take, that I do not think it could be applied to secret poisoning; it could only be applied to animals. I have never known a case of poisoning an adult by means of corrosive sublimate.

317. *Lord Wensleydale.*] Are you aware that there was a case tried before me at Gloucester, 25 years ago, in which the poison used was corrosive sublimate?

I was not aware of that case. If the victim was not aware of it, it must have been mixed with medicine, because the taste is so nauseous, and remains so long in the mouth; it is described as of a coppery taste. I have never met with a case in which it was resorted to for the destruction of human life.

318. *Chairman.*] Would you include in the schedule compounds of arsenic?
 All the compounds of arsenic are poisonous without exception.

319. Then

319. Then would you equally put them in the schedule?

There are some substances used in the compounds of arsenic which are used in medicine, Fowler's solution, and one or two others; and I question how far you can put a restriction upon them. I never heard of a case of poisoning by them; the greatest danger from the compounds of arsenic is from an overdose of Fowler's solution, or from an accident on the part of the dispenser.

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320. As regards the safety of the public, do you think it would be sufficient if we put "arsenic" in the schedule, and omitted the words "and its compounds"?

I think it would.

321. As regards corrosive sublimate, I think you said that in your opinion that is not desirable to be inserted?

I am now confining myself to secret poisoning; I think it is unnecessary to insert it for that purpose.

322. We are told that there would be great inconvenience in putting it into the schedule, because it is required for many purposes of trade; is that so?

Yes, and for medical purposes.

323. Lord *Rossie*.] Are you not aware that the Bill provides for the lawful uses of these articles in trades?

I am speaking of trade, in this instance, with regard to druggists; there are very few trades in which corrosive sublimate is used; I believe it is used by the stainers of gun-barrels, and I think they use it also in photography a little, and in bronzing.

324. *Chairman*.] Would you include in the schedule the next article, which is called the poisonous vegetable alkaloids?

I think they might be restrained, because they are very little in demand, except in dispensing medicine: I do not think the public are at all aware, except in the case of strychnia, to which public attention has been called lately, of the presence of these poisons, or of the character of their compounds.

325. Would you include prussic acid?

Prussic acid is a substance which ought to be put under some restriction, because it is not required for any thing that I know of except as a powerful medicine to reduce the action of the heart.

326. Cyanides of potassium, mercury, and silver; would you include those?

There would be great difficulty in that; as to the cyanide of mercury, I never heard of that being used for poisoning, nor the cyanide of silver; the cyanide of potassium is extensively used in photography, and the difficulty would be, that a person would personate most likely a photographer in order to obtain it: this is a body of a strong taste, but not so strong as corrosive sublimate. The difficulty with respect to such a thing as that would be, in ascertaining the individuality of the person, and saying how he is to get a certificate.

327. To take that branch of the question first, will you go through those clauses in the Bill which refer to the restrictions put upon persons obtaining poisons; you propose that there should be a registry kept?

Yes, a register made and signed by the seller, and also by the purchaser.

328. Will you look at the 6th clause of the Bill; would you require an entry of "the date of the sale and delivery of such poison"?

Certainly.

329. And "the name and surname of the purchaser"?

Yes.

330. "His place of abode, condition or occupation"?

Yes.

331. "The name and quantity of the poison sold"?

Yes.

332. "The purpose for which each poison is stated to be required"?

Yes.

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333. And then would you have "the name and condition of the person giving the certificate for such purchase, with the date of such certificate"?

I see great difficulty in requiring that: I understand that the party is to go to a minister or a magistrate. There would be great difficulty in that practice; many of these things might be required at a short notice, and there might be difficulty in getting at the party who is to give the certificate. If it is done by a magistrate, most likely, after a little time, there will be carelessness in signing these, the same almost as there is with declarations of pledge tickets, and such things.

334. If it were made a condition that any householder should certify that he knew the person, would that be of any use?

That would be a precaution, if it could be done, but the difficulty would be in this respect: does the dispenser know that this housekeeper is himself of good repute? It would afford just this additional precaution, that two persons would know the nature of the purchase, instead of one; that is the only thing that would be gained by it.

335. Lord Wensleydale.] That is a good deal to gain, is not it?
It is something.

336. Lord Rossie.] Do not you think that if a person who wanted to make an improper use of poison had first to go to a householder, and get an order from him, it would make him hesitate?

It would make the fact known amongst his neighbours, and it would direct suspicion towards him in case of sudden death happening; the coroner would be likely to be informed of it through the constable of the neighbourhood: that would be an advantage.

337. Earl of Hardwicke.] On the other hand, the number of persons requiring strong medicines or poisons (for they are much the same) is very large, and the number of persons who are in the habit of applying medicines to their own uses, without consulting a medical man, is very considerable. How would you like, as a magistrate living in the midst of a large population, to be called upon by every person who wanted to use or to administer one of these medicines for a certificate, signifying your consent or approval?

I should not like it.

338. Do you think such a system would be practicable?

I do not think it would be practicable at all in a large town. I should hesitate about doing it, with a population of 150,000, in Bristol. As the senior magistrate at present in Bristol, I should hesitate in giving certificates to persons at Bedminster and Clifton, and other places; I should not know them.

339. What condition would a householder be in, being liable to have his door knocked at, or his bell rung, by all persons wanting certificates to take or to administer these medicines?

There would be great difficulty if all the articles in this schedule were included; but I should think the number that would want arsenic or prussic acid would not be so numerous. They might get a neighbour in the same street, or somebody close by, to walk with them to the chemist's shop. I think it would be better to have the attendance of a witness than to have a certificate.

340. Lord Wensleydale.] You think that would be more likely to repress the evil?

It would; because, if one person was not recognized by the seller, the other might be; or if one was not known to the seller, the other might be; because I think this is desirable principally with a view to identification afterwards.

341. Lord Rossie.] Whom do you look upon as a householder?

In some instances it would be very difficult to define it: in Scotland, it would be the occupier of a flat; in others it may be the occupier of a cottage, or a party holding half a house.

342. Lord Somerhill.] As it is obviously the intention of the Bill that a man shall not get a poisonous medicine unless he is known to some householder, would there, practically, be any difficulty about that?

Yes, if you speak of medicine generally. If the poisons specified in the Act
are

are few in number, I see no difficulty ; but if it is a large number, I think it is next to impossible. *W. Herapath, Esq.*

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343. Would not that difficulty be reduced to this, that if a person be resident in a district, in whatever class of life he may be, he is almost sure to be known to some householder ; and if he be not, he must, as a last resort, state his disease or his want to a medical practitioner, and get an order from him ?

I think it would very rarely happen that a person would be in a neighbourhood where nobody knew him ; he might say to a neighbour, walk with me, or give me a note to the chemist and druggist, to say that I want such a thing, or that you know me ; I do not think there would be any difficulty in that.

344. *Chairman.*] We are told that it would probably tend to this, that a person finding a difficulty in getting an article that he wanted, would say, " Now that I have got a signature, I will get three times the quantity, because it will save the necessity of another application ;" do you think that would be likely to be the effect ?

I suppose the question refers to such medicines as would produce death by an overdose, such as opium.

345. Suppose that he said, " I want this medicine, but I do not like the trouble of going through this form of application for it ; I will therefore get three or four times the quantity that I want, and put it by ;" would not then the danger arise that there would be a store of poisons not under oversight which had been procured in this way ; would not danger be more likely to arise from that store than from the store in the apothecary's shop ?

The great difficulty of attempting to restrict opium is this, that I know it has been the practice with persons committing suicide to get a small dose at each of a great number of shops, and in that way make up a quantity sufficient to kill ; that is the difficulty of legislating with respect to opium, because no chemist would hesitate to sell three or four drops of laudanum.

346. *Earl of Hardwicke.*] You would exclude opium or laudanum from the Act ?

I do not see how it is to be included ; if it were practicable to do it, it would be advisable that it should be done ; but I cannot see how it can be done, because many people suffering from the toothache or the earache want a few drops of laudanum.

347. *Lord Somerhill.*] But with respect to judicial investigations, would not the fact of a person having gone to different shops, and having obtained small quantities of a particular poison at each, at any rate indicate the intention of the person, and help to clear up any doubt that might exist with respect to his having had in his possession or having administered a sufficient quantity of poison to produce death ?

But the great difficulty would be to get that evidence, because the fact would not be noticed of his purchasing those small quantities of laudanum ; the dispenser would not be likely to notice it.

348. But my question supposes that by the clauses in the Act those purchases were required to be noticed and registered ; if that were done, it would be known that he had made those purchases ; and although you might not prevent his committing suicide, or his committing murder, you would have some strong evidence with respect to the use of the poison by that person ?

I am afraid that the sales of those small quantities are so frequent, that it would be an intolerable nuisance to be obliged to enter them all, and I am afraid it would not be carried out in practice ; if it could be carried out, it would be a good thing, but I fear it would be next to impossible in large towns. I should think that their entries of small quantities of opium would sometimes be 100 in a day.

349. I did not mean my question to apply to opium alone, but to arsenic, and to all poisons that may be retained in the schedule of the Bill ?

I do not think that people ever think of purchasing arsenic in such small quantities as not to kill life. I have never heard of a person accumulating small quantities of arsenic in that way ; there is no necessity for doing it ; less than three grains will kill.

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350. Does the objection you have stated of the impossibility, as you apprehend, of enforcing a registration of the purchases, apply entirely to opium? Certainly; that is the article that there is the greatest difficulty about.

351. Lord *Wensleydale*.] In the case of opium, would not it interpose considerable difficulty in the improper use of it, if a person were obliged, on all occasions, to get the sanction of a householder to his purchasing it?

Yes; but I do not conceive that it could be carried out in practice, unless there was a general certificate given; I mean by somebody giving a certificate to an opium drinker, which should last a considerable time. The certificate might state that such a person is in the habit of taking 100 drops of laudanum at a time; and the man should always go to a particular shop to buy it.

352. Earl of *Hardwicke*.] Supposing a party, having got a certificate, goes and buys so much laudanum, and comes back a few minutes afterwards, and says, "I have had an accident, and broken the bottle," and he brings the broken pieces of the bottle, having transferred the laudanum into another bottle; may he not in that way get a large quantity into his possession?

That is quite true; that is a difficulty which applies to a common medicine like that.

353. *Chairman*.] Then am I right in understanding that you are of opinion, after fully considering the subject, that opium had better be excluded from the schedule?

I think it is advisable to put it there, if any practical plan can be found of carrying out the Act with respect to it.

354. But you see so many difficulties in doing that, that you think it may be excluded?

I could not recommend it to be included.

355. Lord *Rossie*.] Would you be prepared to give in to the Committee a list of those poisons which you think might be included in the Bill?

I should confine it to such poisons as could be used to destroy the life of others.

356. Would you include all those poisons with their preparations?

No, I would not; I would specify by name every thing that was to be included. I would name the particular preparation, whatever it may be. There are several things that are not in the schedule which are poisons, and which will be obtainable at almost every grocer's shop in the kingdom, and that will be a principal difficulty of this Bill.

357. Do you think that the enumeration in the Act of a list of additional poisons would be attended with any danger of drawing the attention of the public to the use of them as poisons?

Yes, I do; that is one of the principal difficulties, which occurs in toxicological inquiries in courts of justice, that the public get educated into the subject of poisons. No sooner does a poison become known, than every attention is paid to it; hundreds of people in many instances throng the courts for the purpose of learning, and they talk amongst each other, and they soon get to learn how that poison can be used; they get a knowledge of its nature, its quantities, and its mode of action, and so on; and thus it is that I have found since Palmer's case the use of strychnia as a poison has been much more known than it was before.

358. If these poisons were enumerated in the Act of Parliament, you think that would have the effect of drawing the attention of the public to them?

Yes; the Act of Parliament would get published, and the public generally would get better acquainted with the nature of those poisons.

359. Lord *Somerhill*.] Have there practically been more attempts to murder by the use of strychnine since Palmer's execution than there were before?

Certainly; I have had several cases of strychnine latterly. There have been a great many cases in which it has been applied to animals.

360. Can you state to the Committee any particular cases of conviction of poisoning with strychnia that have happened lately?

No, not convictions, except the case at York. There was a case that I knew in

in which a suicide was committed with nux vomica in the neighbourhood of *W. Herapath, Esq.*
Hanham.

361. But except the case at York, has any person been convicted recently of murdering with strychnia?

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I do not recollect any case that has come to my knowledge.

362. Lord *Talbot de Malahide*.] Was not the nature of strychnia known to gamekeepers many years ago?

Yes, in the shape of nux vomica, but not in the shape of strychnia, I believe; I do not think it was so generally known as nux vomica. But in Australia I know that as large a quantity as 12 lbs. a year has been sent over for the destruction of the wild dog. The great use of the strychnia imported from France is to send it to Australia; there is an association formed for that purpose. There is another point that I should like to mention; I do not see that this Bill at all contemplates the restriction of patent medicines. Now some of those are very dangerous. There is Daffy's elixir and Godfrey's cordial, which are used in some districts for the purpose of destroying children; sometimes to keep them quiet, and sometimes intentionally to destroy them. I do not see that there is any restriction intended to be placed upon them; and I do not see how it would be possible to do so.

363. Are the articles of which those medicines are composed not included in this list of poisons?

It is by opium that the effect is produced; those things would be sold, not by a surgeon, and not by a chemist or an apothecary, but frequently by a common shopkeeper.

364. But if they are preparations of any of these poisons, they could not sell them under the Act?

But I do not see how it could be known that such bodies were in those patent medicines, because there are no analyses of those medicines; the obtaining a patent is such a merely formal application, that it does not come under the notice of the Government. For instance, there is Holloway's pills, containing a large quantity of a drastic purgative, yellow gamboge, which is well known to kill when used in large quantities. Now I do not see how you could legislate, unless you put patent medicines under some Board.

365. Lord *Somerhill*.] You think that legislation should be limited to a few particular poisons?

To a few poisons.

366. *Chairman*.] Having been determined upon that limited number of poisons to which the legislation should be applied, will you state more fully how you would propose to deal with them; the first thing that you state is, that you would require a certain register to be kept of the sales, and certain items to be put in the register, which should be signed by the seller and the person purchasing?

Yes.

367. Would you allow a chemist's boy, or anybody that might be in the shop, to sell, or would you restrict it to the head person of the establishment?

Those secret poisons ought to be sold only by a qualified person, and there the difficulty would be this, that in country places I am afraid that you will not always find a qualified person; but if you gave a certain time, and said that after a certain time, one or two years, no poison should be sold but by a qualified person, I think that would tend to make those parties qualify themselves.

368. Lord *Talbot de Malahide*.] Would you allow no poisonous drug or medicine to be sold by any person who was not properly qualified?

I do not know as to those that are not dangerous; I do not see why they may not be; the difficulty of that would be, that you would subvert the whole of the druggist's trade through the country, and there are many thousands of persons engaged in it. I think you must allow those persons to go on as they are now for a time; there is a gradual education of the druggist going on; the Pharmaceutical Society is now endeavouring to educate that class of people, and to render it compulsory upon them that they shall pass an examination; if you can quicken that operation, I think you would be doing good.

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369. You think it would be desirable if you could make it compulsory on those parties to be examined?

I think if you give time so as to enable the parties to get educated, you may do it; but at the present moment you would not find educated persons enough to attend to the sale practically.

370. Would not such a restriction be likely to have the effect of very much enhancing the price of several very useful drugs?

There is no doubt of it.

371. So that it would tend to create a monopoly, and to confine the sale of those drugs to great towns; because in country villages you could not get qualified persons to do it, nor could you expect qualified persons to undertake the sale of these things at the rate at which grocers would do it?

No; in most country villages those drugs are sold by grocers.

372. Lord *Wensleydale*.] Would you put any restriction as to the age of the person selling these poisons?

The apothecary himself has a very strong motive to employ a proper person, for this reason, that if a mistake is made in his shop, it is ten to one that he is ruined; of course everybody will avoid him.

373. Do you think it would be proper and desirable to say that no person who is under age shall actually be the hand to sell any of those poisons?

If only a small number are put in the Act, I think you might limit it in that way.

374. You have not told us what articles you think ought to be included in the schedule; will you state what you would specify?

There is arsenic and there is prussic acid, and the poisonous alkaloids; I would include of course belladonna, hemlock and aconite; as to opium, there is the difficulty I mentioned before.

375. You would include strychnia?

That is amongst the alkaloids.

376. *Chairman*.] Would you when you had completed your schedule, limiting it to those articles that you wished to put in it, limiting the sale, but not allowing those articles to be sold except by a certain number of registered and properly qualified persons?

I would, in large towns; but then comes the difficulty, how you are to get that class of persons in country villages; I do not think it can be done in villages at present.

377. Would you recommend any further precautions as to the mode of keeping the medicines, either by keeping them in separate cupboards, or by keeping them in peculiar bottles, or in any other way?

I think you may with advantage have them kept for sale in vessels of a peculiar character different from others; but I do not think you could limit the sale of them to vessels of that description; because in country villages and other places people are in the habit of bringing their own bottles; if you sent out a dangerous article in a bottle of that sort, it is ten to one that that bottle would soon be used for some other purpose; but I think that in the shop you might have them kept in bottles of a peculiar shape or colour; and I think that such things when sent out may be also covered with a paper of a peculiar colour.

378. You would have them kept in the chemist's shop in bottles of a peculiar construction, or of a peculiar colour, and with peculiar labels?

Yes; but I would not recommend their being kept in a distinct place.

379. But when the chemist sends it out by sale, you think he might send it out in any ordinary vessel or box without being required to put it in a vessel or box of a peculiar shape?

If he sells it, I think he may be required to put it in a vessel of that sort; but I would not extend the restriction so far as to say that the article shall never be put into any other bottle.

380. Supposing the chemist sent it out in a peculiar bottle, would not this be likely to happen, that a poor person would probably use that bottle afterwards for

for many other purposes, so that the bottles would become mixed, some poison bottles, and some not poison bottles?

Yes; but then the only disadvantage would be that he would not take the beneficial medicine, because it was in a poison bottle.

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381. Lord *Somerhill*.] Supposing the law were to be made the same in this country as in some other countries, namely, that any person who keeps poisons of a certain description in paper or bottles not of a certain colour, be he a trader or be he not, is liable at once to a penalty; how do you think that would work?

I do not think Englishmen would like that sort of legislation as applied to private individuals.

382. What objection could any rational person have to it after a short period?

But all Englishmen are not rational; some classes require a great deal more education to make them so.

383. But if other nations, who are generally supposed to be less intelligent than the English, find no practical grievance whatever from that system, but, on the contrary, considerable advantage, is there any reason why it should not be adopted in England?

I cannot express an opinion upon it: if the thing could be practically acted upon, it would be advisable; but I do not see how it could in this country.

384. If such a law were passed, of course bottles and papers of the particular colour required would soon become very common; then what practical difficulty could there be in any person who had occasion to keep poison having a paper or bottle of that colour in which to keep it?

It seems to me that it would convert the nation into a nation of informers. It would subject an individual to be fined by a spiteful neighbour, by lodging an information against him. Suppose a man in his own house happened accidentally to change a bottle, or something of that sort, he might have a spiteful neighbour who might observe the thing, and lodge an information against him.

385. *Chairman*.] If a photographer, for instance, keeps some poison in a bottle, and a friend of his wishes to try photography, and borrows a little of it in another bottle, he would be liable, under such a law, to a penalty for having put poison in a bottle not properly verified?

He would.

386. Lord *Somerhill*.] What difficulty would there be in his getting a bottle of the right colour to put it in, which would not practically cost him more than one penny?

That is if he could get it; but it is not always that there would be a supply obtainable.

387. If it is true that in other countries, whose manufacturing skill can in no way compete with that of England, abundance of coloured paper and bottles is to be had without any perceptible enhancement of price, could not that difficulty very easily be got over in England?

As I have not seen the working of such a system anywhere, I cannot express an opinion upon it. I have understood that in countries where such laws as this are in force; there is at the same time a sort of commission for going round to examine druggists' stores; I know that in Hanover there is a commission of that sort to examine all druggists' shops.

388. Supposing the habit were to be formed of keeping poisons in bottles and papers of a peculiar colour, would not that fact be of great assistance in all judicial inquiries after the administration of poison accidentally or otherwise; and would it not be of great assistance in guarding children or servants against poison?

It is very likely it might be of assistance; but it is the penalty that I am looking at; it might be an act of ignorance, or it might be an unintentional act, yet a man would be liable to a penalty: it is so rare to find death arising from things of that sort, except from carelessness, and then it is with children principally, rather than with grown persons.

W. Herapath, Esq. 389. But is not the exception you mention, namely, carelessness, one of immense extent, practically speaking: looking at the number of deaths that have occurred even in the last three years in the United Kingdom, is not that exception an immense one?

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I do not know what number of deaths have occurred from poison; but I do not think they are so numerous as appears to be imagined.

390. Have you noticed in the papers in the last few years the number of persons in families who have lost their lives, or had their health injured, by accidental poisoning?

Yes; but when you come to calculate that that is in 28,000,000 of people, I do not think it is a very large per-centage.

391. Lord *Talbot de Malahide*.] Would you say that there are more cases from mistakes of druggists or their apprentices, or from those of individuals in their own houses?

More in private houses, certainly, I should say.

392. Lord *Wensleydale*.] Would not that be prevented in a great measure by persons being obliged to have the poisons in vessels of a particular shape and colour, so as to attract attention to them?

I think it would be a proper practice to have triangular bottles or boxes of some particular shape for keeping poisons in; but my difficulty is about enforcing a penalty if through an accident that is not done in a private house.

393. Lord *Talbot de Malahide*.] I understand you to state, that the Arsenic Act has not been found to diminish the poisoning with arsenic?

The total number of deaths by poison will be as great now as it was before, but the number of killed by arsenic is less. I believe that the murderers by poisoning have transferred their operations to other poison, speaking from my experience of the number of cases that came to me, which are many hundreds.

394. Have you found that the cases of poisoning through arsenic have diminished since the passing of the Arsenic Act?

I do not think there have been nearly so many as there were before.

395. Lord *Somerhill*.] Has the Act relating to arsenic diminished the accidental poisoning by arsenic?

I think so.

396. Lord *Wensleydale*.] Do you see any reason why a similar restriction with respect to other poisons should not have the same effect of diminishing poisoning by those other means?

Ultimately it might have that effect. In the case of the Arsenic Act, at first the operation of the system was rather interfered with by the caution of the druggists, who knowing sometimes that they had been not sufficiently careful, and that they had perhaps made themselves liable to a penalty, would not identify persons who had been at their shop to buy, because had they identified them, it might have made them liable to a penalty. But now I believe that over a considerable extent of country you would find a difficulty in buying arsenic, which you would not have found before the passing of the Act.

397. Lord *Rossie*.] Supposing there to be a limited number of poisons, such as you would now approve of, included in the schedule; would you approve of a power being given to add to that schedule by authority?

Yes; by the Government, in communication with such a body as the Pharmaceutical Society. There are occasionally matters introduced into the Pharmacopœia, or into commerce, which might properly be introduced into the schedule; I mean poisons of the same description that I speak of, poisons that could be taken without the victim being aware of it.

398. Then the Secretary of State, or the Privy Council, by the advice of a specified authority, you think might have power to add to the number of poisons in the schedule any others that might become known of the same description?

I think that might be done.

399. *Chairman*.] Why should the Secretary of State and the Pharmaceutical Society make laws, instead of Parliament?

That

That is no doubt touching upon the constitution, to a certain extent : it would be better done by an additional Act of Parliament.

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400. If a poison became dangerous in the country, would it not be very easy to bring in an amending Act, introducing that poison into the schedule?

For instance, we know now that * * * is a powerful poison; it is only lately that we have known it as such; it has not been used in that way in any instance that I know of, but still it might be used.

401. I understand that you think that bottles of a peculiar colour or construction only should be used for keeping poison in a chemist's shop, but that you think that it should not be compulsory on all persons who purchase poison to keep it in such vessels?

I think that when the druggist or chemist supplied such matters, he should supply them in such vessels; but I would not make it compulsory on the individual to keep it in such vessels, nor would I put a fine upon any person who did not do so.

402. *Lord Wensleydale.*] Would you allow a person to come with an ordinary round bottle, and to take any quantity of poison in it?

No, I would not; because I would expect that the chemist should take his bottle, and give him the poison in another bottle; but after it is once out of the druggist's hands, I would not extend the legislation to the man's private house.

403. *Chairman.*] How would that effect the dispensaries: we have been told that it would be very inconvenient with regard to a dispensary where patients bring their own bottles to get a particular drug, that the chemist should be bound to furnish them with other bottles?

It would not be practicable with the schedule now in the Bill; but with the limited schedule I speak of, there would be no difficulty, because arsenic and prussic acid are by no means administered in such quantities as to interfere with this legislation; but with such an extensive schedule as this, I think it would not be practicable.

404. You are supposing throughout your examination that we adopt a limited schedule?

Yes.

405. *Lord Somerhill.*] Practically at the dispensaries do not they dispense medicine according to prescription?

Not always; an apothecary does so, but not a druggist.

406. But it is under the prescription or advice of a professional person?

Yes; but a druggist does not confine himself to that. At the dispensaries they have generally a surgeon, or a medical man in attendance.

407. The medicine is given under the advice, written or oral, of a medical man?

Yes.

408. Therefore it would not affect the law generally if an exception was made in favour of dispensaries, because persons would only take away from dispensaries certain prescribed doses?

Yes. There is another class of poisons which I have not alluded to, and those are substances used for destroying the foetus; there is ergot of rye and savin.

409. *Chairman.*] Would you keep them in the schedule?

I think I should, because they do not require to be used, except under the advice of a medical man.

410. *Chairman.*] In clause No. 9 in the Bill it is proposed that, as a means of protecting the public from poisoning, poisons should be mixed with certain colouring matter; do you think that would be any protection?

No. I see that in the case of arsenic, it is proposed that it should be required to be mixed with soot or indigo: now, there would be no difficulty in that being removed instantly, for this reason, arsenic is so heavy, that it is three times and a quarter the weight of water; it is even heavier than sand; it lies like sand at the bottom of the vessel which has had arsenic in it; but indigo and soot

W. Herapath, Esq. are both lighter ; therefore, if a person was to put this in a vessel, it would be easy to take all the colouring matter out, and to leave the arsenic behind.

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411. *Lord Rossie.*] How is arsenic coloured now ?
That is the present practice.

412. *Lord Wensleydale.*] Although it would not be so effective as if it were quite incapable of separation, still it would be effective to a certain point, would it not ?

Only to a certain point.

413. *Chairman.*] Would you not apply to arsenic the precaution of having it so coloured ?

Yes, as far as it could be so done : I think if you mix the black oxide of manganese with it, it would be better ; it is about the same weight as arsenic.

414. *Lord Wensleydale.*] Is not that more expensive ?
No ; it is only 6*l.* a ton.

415. *Chairman.*] Is there any other article that you would put into the schedule to which you would insist upon colouring matter being applied ?

No. With respect to prussic acid, you could not colour that. The druggist or chemist is himself in the habit of colouring many of his medicines, to deceive the public, as he does by writing in Latin ; he uses most commonly a reddish colour to disguise the medicines ; I do not know what colour he could put in. In the case of prussic acid, it would be useless, for it is only given by the drop.

416. *Chairman.*] What is your opinion with respect to the provision in the 9th clause, that colourless liquid poisons should be required to be coloured with archil ?

Archil is of itself coloured variously ; in its natural state it is quite red ; but a drop of vinegar, or any slight acid put into it, would change its colour altogether ; it would no longer have its distinct colour.

417. So that you think that the use of archil would not be effectual ?

I do not think it would be of any service with fluids, because so many fluids are themselves coloured, even when not artificially coloured. I do not know of any colour that you could add that would answer the purpose. With respect to prussic acid, it is not necessary ; prussic acid is easily detected, if it gets into the victim's hands, by its very peculiar and disagreeable smell.

418. Will you look at clause 10, which says that if any poison be given or furnished by any person whatever to any other person, such gift or delivery shall be deemed a sale ; do you think that the clause should be retained as applicable to a limited number of articles, so that a person could not administer any of those articles even to anyone in his own house ?

It would be interfering with the liberty of the subject : suppose, for instance, I keep prussic acid in my house, and I have somebody in my house who has disease of the heart, and I want to lower the tone of the heart, it would be very hard that I could not give a certain quantity of weak prussic acid for that purpose without being subject to a penalty.

419. Suppose that, instead of that clause, it were put, "if any poison be given or delivered by a retail dealer to any other person ;" do you think that it might stand in that form ?

Then it might stand, because it must be with some object. If you have not some clause of that sort, the Act might be defeated, by the man saying, "I will give you some ;" and the other party might throw money on the counter, not apparently for the payment, but really so.

420. Will you look at the next clause, which allows a number of persons using those poisons for the purposes of trade to obtain them. Do you think that clause 11 ought to stand with the restricted number of poisons that you propose in the schedule ?

I think it might, with the small number of articles that we have been speaking of.

421. Might we not put restrictions upon the obtaining of these articles by a number of those trades who now obtain them, if we limit the number of articles to which the restriction is applied ?

No,

No, I do not see what trades that could be done with ; for instance, a farmer buys arsenic now in large quantities, for certain diseases of his sheep, and two or three cases have occurred within my own knowledge where that arsenic has been made the means of destruction.

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422. Would you restrict a farmer from getting arsenic ?

I would restrict him from giving it to any other person, but you cannot restrict him from getting it ; he would have, I presume, a certificate from somebody.

423. But farmers are not included in this class of exemptions ?

If other persons are included, they ought to be included, certainly.

424. Might we not insist that the persons included in this exempting clause should go through the same simple form of signing their names as other purchasers of these poisons ?

I see no reason why they should not do so with a limited number of poisons.

425. You think that if we limit the number of articles in the schedule, we might also limit the number of persons exempted ?

I think so, certainly ; I think that if a person wants arsenic for any purpose, he ought to go and say, " I want it for washing sheep," or whatever it may be, and write his name in the book.

426. Lord *Talbot de Malahide*.] Then, would you have no exemptions ?

No, I do not see any reason why there should be any exemptions.

427. Lord *Rossie*.] You think that no person should be exempted if the schedule is limited to a certain small number of poisons ?

Yes.

428. In giving a list of poisons which should be put into the schedule, you do not intend to include the compounds ?

No, except they are named.

429. Lord *Wensleydale*.] Would you have any difficulty in naming the compounds of all those substances which you would propose to put in the schedule, which could not safely be sold generally ?

I do not think I should have any difficulty in doing that.

430. Will you have the goodness to put those down for the use of the Committee ?

I will do so.

431. *Chairman*.] If a schedule of this kind were proposed to be put in by the Secretary of State, in what way do you think that the Secretary of State could best proceed to get such a schedule as could safely be used for the purposes of this Act of Parliament ?

The main difficulty would be with respect to the alkaloids ; I do not think it would be possible to give the compounds of alkaloids ; with respect to arsenic, you might do it, and with prussic acid you might.

432. Lord *Talbot de Malahide*.] Would you confine the schedule to those substances that you have known to be used for the purpose of poisoning ?

I would confine it to those that are known to be used for poisoning, and if the public got better acquainted with the use of poisons, you might extend it by degrees ; but I would not have it embrace too much at first.

433. *Chairman*.] Could you give to the Committee a list of poisons which you think might be safely adopted for the schedule ?

I could not give in an infallible list, but I could give my idea on some of them : *cocculus indicus* I should include, because it is never required for any thing ; ergot of rye and savin should be in the list.

434. What do you say as to lobelia ?

If you include lobelia, then you interfere with the herb doctors, and very properly, because I believe there is more danger from the unlimited sale of herbs, than there is from the articles in a druggist's shop. I have known cases of death from lobelia.

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435. If we put too many things into the schedule, should not we run the risk of raising up a low set of dealers, who would sell clandestinely things that were poisonous?

That is one of the dangers of attempting by restriction to prevent poisoning.

436. Lord *Talbot de Malahide*.] Could there be a lower set of dealers than those that exist at present?

No, I think not, as to the herb doctors and country grocers.

437. *Chairman*.] You would subject to a penalty any person who obtained these articles without signing his name?

I think so.

438. Therefore any person who had in his house poisons of this character, and who could not refer to an entry showing where and when he had bought them, would be under this Act placed in very suspicious circumstances, if not liable to a penalty?

Yes; but you could not fine a man for merely having it in his house; you may ask him to account for it, but it may be put there by other parties over whom he has no control; but if you proved that the man had bought it, and had not signed his name to it, then you might make him liable to a penalty; so you might the person who sold it, and did not do his part of the register.

439. Then would you impose a fine upon the chemist also who sold it without those precautions?

Yes, upon any individual who actually sold it, and did not take the precautions required.

440. What do you think would be a fair amount of fine to impose for a transgression of the law with respect both to the bottles in which the poison ought to be kept and to the certificate?

It should not be a large fine, for this reason, that they would always attempt to evade it; but if it is a small fine, the man would be punished also morally, because his master would be sure to discharge him; if his master did not discharge him, he would lose his business.

441. Lord *Rossie*.] You do not approve of the provision in the Bill that any body convicted of a second offence should not be allowed to carry on the business of a druggist afterwards?

Certainly not; it would be complete destruction to a man.

442. Lord *Wensleydale*.] Do you think that the penalty should be imposed upon the master, or upon the individual who actually sells the article?

Upon the individual; it is a personal offence; the master might take all the precautions he could, and yet find that the servant would not obey his orders.

443. *Chairman*.] You have spoken of intentional poisoning; now, with respect to unintentional poisoning, can you suggest any precautions to the Committee which you think it would be useful to insert in the Act?

I approve of the precautions which have been suggested with respect to the bottles and packages, and so on; I think that those would be proper; I do not see anything else that can be done by legislation; the great difficulty is in securing properly qualified men; if that could be done, that would to a very great extent prevent the evil.

444. What do you think would be the best shape of bottle to use for the purpose?

It must not be hexagonal, and it must not be octagonal, because those are already used. There is nothing but the triangular left that I know of as a regular figure.

445. Lord *Somerhill*.] Although you could not prevent people using those bottles afterwards for other purposes, you might prevent persons from selling poisons in any other but those bottles?

Yes, that is what I have stated.

446. Lord *Wensleydale*.] That would not be a complete prevention; but it would be a check, as far as it went?

It would be a check.

447. Do

447. Do you think that the introduction to the public of the names of a great many other poisons, by mentioning them in the schedule, would be attended with more mischief than the public would gain benefit by a restriction upon the sale of them?

W. Herupath, Esq.

16th June 1857.

I think so; I think a great deal too much has been published about poisons.

448. But as soon as it is discovered that they are used for poisoning, is it not wise to prevent the sale of them?

If you could do so; but then you get into the other difficulties I have been alluding to to-day.

449. *Chairman.*] Is not it the case, that on the occasion of every trial for poison there is a great deal published upon the subject, because there are always chemists called to explain the nature and operations of the poisons?

That is very true: I endeavour to avoid answering such questions when I am not forced to answer them.

450. *Earl of Hardwicke.*] Do you think that the introduction of legislative measures for the purpose of noticing or restricting the use of poisons has tended very much to enlighten the public mind with regard to them?

With respect to arsenic it has; but I do not know that it has with respect to anything else.

451. Do you not think that it is better to trust to the discovery of poisons by examination after death, and to visit with punishment those who poison, than to attempt to legislate to prevent the giving of poison?

I think so; I conceive that no great benefit is gained by the restriction; I should rather depend upon perfecting the education of those who have to dispense medicines than upon restriction.

452. Although arsenic is a deadly poison, is it not at the same time a poison that is very easy to discover after the death of the person poisoned?

The easiest of all.

453. Would it not have been, upon the whole, better to have allowed matters to rest as they did, with the impression upon the public mind that there was nothing else but arsenic that could be used for poisoning, and to let the law take its course, by discovery after death, rather than to introduce these debates and legislative measures, whereby much knowledge has been given to the public upon the subject of poisons?

I think so, decidedly.

454. *Lord Somerhill.*] Do you think that, practically, in this country you can confine scientific knowledge to the higher classes of society?

No; but they are much longer arriving at those matters, which are known only to scientific men.

455. Do you think it desirable that they should be left in ignorance: take even the class of farmers, and the numerous classes of trades mentioned in the exempting clause of this Bill; do you not think it desirable that they should extend their knowledge of chemistry?

Yes, of the great facts of chemistry; but they need not have a knowledge of the facts connected with the administration of poisons, because you have a class of men who are always at your beck and command, whose special duty it is to be acquainted with these things. It is not necessary to have your servants acquainted with medicines dangerous to life. I have met with a few cases where the ignorance of working men has done mischief, such as a man giving sulphuric acid to horses, to smooth their coats, and giving it in too large a quantity, and killing. But, generally speaking, I do not think that much mischief arises from the ignorance of the working classes of the nature of poisons.

456. *Earl of Hardwicke.*] In reference to the question of the knowledge of poisons, supposing that, for the sake of the discussion, we divide the population into three classes, the upper class, so called, the middle class, so called, and the lower class, so called; which of these classes do you think has the greatest knowledge of the application of chemistry as to poisoning matters, and other branches of chemical knowledge?

W. Herapath, Esq.

16th June 1857.

The middle class, certainly. Until lately the upper class did not study chemistry so much as they ought to do.

457. Lord *Somerhill*.] In my question "by the higher classes," I meant the educated. Do you think that you can confine a general and extended knowledge of chemistry to merely the educated classes?

Certainly not. You have it now made as common as possible all through the kingdom; that is, you get a smattering of chemistry made common, but you do not get a complete knowledge of chemistry.

458. But do not you think that that smattering is of great use to the classes who possess it?

No. I think that there is no art or science to which the aphorism that "a little knowledge is a dangerous thing," is so applicable as chemistry. I have seen more hundreds and thousands of pounds thrown away by persons possessing a little knowledge of chemistry than I have by persons who are perfectly ignorant of it.

459. Do you apply that even to the use of chemical manures by farmers?

Yes; till very lately, when they have got better acquainted with them, in the last four or five years.

460. If within the last four or five years you think that the farmers have greatly increased in their elementary knowledge of chemistry, do you think that they are likely to make much greater progress in the next four or five years?

Yes, no doubt of it. There is no doubt that the agricultural department of the world has improved very considerably in consequence of lectures, and the introduction of mineral manures; but till within a very few years they were very deficient.

461. In other classes, besides the agricultural, has not a small smattering of chemical knowledge been found of great use; take photography, for instance; is not that so?

Yes. As to the action of light, they have some acquaintance with it practically, but not with the theory; none of them know anything of the theory.

462. But without having any notion of the theory, if they know practically how the results are obtained, is not such knowledge as that useful to other classes besides farmers?

There is no doubt that such knowledge is beneficial to all, except the evil-doer.

463. Lord *Talbot de Malahide*.] Do you consider that the knowledge which the public have obtained of the nature of poisons has been chiefly by means of legislative enactments, or by trials in courts of justice, and publications on toxicology?

There is no doubt that the trials have contributed towards it; but there have not been many cases brought before the public, with the exception of strychnia, and one or two other cases referring to hitherto unknown poisons.

464. And antimony?

Yes.

465. But arsenic is the only poison with respect to which there has been an attempt to legislate hitherto?

Arsenic is the only one, so far as I know.

466. Lord *Wensleydale*.] And poisoning by arsenic has been very much stopped?

Yes.

467. *Chairman*.] Will you have the goodness to send to the Committee a list of the poisons which you think should be included in the schedule?

I will do so.

The Witness is directed to withdraw.

JOHN HAMMILL, Esquire, is called in, and examined as follows :

J. Hammill, Esq.

16th June 1857.

468. *Chairman.*] HAVE you seen the Bill that has been brought into this House for restricting the sale of poisons?

I have had the Bill put into my hands, and I have hastily looked over it.

469. In your position, as a police magistrate, has the subject of poisons, and the danger arising from the sale of poisons, come before you?

I have seen many instances during the last 10 years while I have sat as a magistrate for Worship-street, in which I have thought that poison has been most incautiously sold to people whose appearance must, I thought, have denoted to the druggist who sold it that they were in a wretched condition, and not fit to be trusted with it. The article which has been sold to them chiefly was laudanum.

470. Has that led you to the opinion that some legislative interference would be of advantage to the public in that respect?

It has long been pressed upon me by the surgeons attending the various hospitals in that part of London that there ought to be some legislative interference in the matter; but as to the mode in which it ought to be carried into effect, I should fear there would be great difficulty.

471. The chief article to which you think that that legislation should apply, is with regard to the misuse of laudanum?

That is what has been most frequently before me. I think there was one case of arsenic during those 10 years; and last year I think there was a case, arising from a substance which is not classed as a poison, sulphate of potash; it was the case of a man who had no intention whatever of administering poison to his wife, but the wife being, as she thought, in the family-way, suggested to her husband to buy sulphate of potash, and she administered it to herself, and caused her own death in that way.

472. What was her intention?

To procure abortion; and the husband assisted her in that intention, and I, of course, found it my duty to commit him for the murder. He had no intention of poisoning his wife, but simply to aid her in her wish to get rid of the foetus.

473. *Lord Somerhill.*] In noticing the want of a restraint upon the sale of poisons, do you refer chiefly to accidents and carelessness, or to intentional poisoning?

I refer to the sale of poison to wretched objects. I think the druggist ought to have seen that he was dealing with people that he ought to have been on his guard with, that is, if they presented the same appearance to him that they did to me.

474. Do you mean that they were persons who meant to commit crimes, or that they were liable to make a mistake in the use of the poison?

Persons who intended to commit suicide.

475. *Earl of Hardwicke.*] What reason had you to think that they wanted to commit suicide?

They were charged with suicide, and I thought their wretched appearance made them appear likely to commit it.

476. Was there any evidence to show that they intended to commit suicide by taking laudanum?

No. My notion was, that when a person presented himself apparently in that low and desponding state of mind, and asked for laudanum, a druggist of education, a man in a respectable class of life, ought to have been very cautious before he trusted him with it.

477. *Lord Wensleydale.*] They were brought before you as having made an attempt to destroy themselves?

Yes.

J *Hammill, Esq.*
 16th June 1857.

478. Lord *Talbot de Malahide*.] Do not you consider that to persons of certain habits laudanum is a necessary of life?

I am not able to speak with any great knowledge upon that subject; but I hear it frequently said that it is taken by some persons in that way.

479. *Chairman*.] Has it come before you that it is largely sold to the poor for other purposes than for suicide?

No; I have no knowledge upon that subject more than by hearsay.

480. With regard to the misuse of any other kind of poison, have you known cases where ergot of rye, or savin, or other things of that kind, have been used as poisons?

I do not remember having had any case of that kind.

481. Has your acquaintance with poisons so brought before you been entirely or chiefly with laudanum, or is there any other poison which has come before you?

The only other I think is that which I have just now mentioned, namely, sulphate of potash. The druggist who came, in that case, stated that he had not been asked for such a thing before, though he had been in business upwards of 20 years; in fact he at first said that he had not got it among the articles he sold, but he afterwards said that he had.

482. Would you recommend that any restriction should be imposed upon the sale of laudanum, and that if a very poor or very wretched looking person wished to buy a little laudanum, a druggist should be liable to a penalty for selling it to him because he was a poor looking man?

Not exactly for being a poor looking man, but on account of his distressed state of mind.

483. As indicated by his appearance?

Yes.

484. Do you think you can legislate for such cases?

I do not see that you can, because a poor man might want it for the toothache, or any thing else, as much as a rich man.

485. And he might look very distressed in consequence of a bad toothache?

Yes; but when I say "distressed," I take all the various indications, not only his countenance, but his dress, and his wretched appearance altogether.

486. Do you think it would be desirable to insist upon a record being kept of all sales of poisons, and to say that no person shall be allowed to buy laudanum without signing his name, and giving his address, and saying for what purpose he wanted it?

There are many poor people who may be *bonâ fide* in want of it who could not sign their names.

487. But they might put their mark?

They might put their mark.

488. Lord *Somerhill*.] Could they be in want of it for any proper purpose without being able to state clearly for what purpose they wanted it?

No; but it does not follow that the purpose stated is a *bonâ fide* one. I think that in one case I remember, a very poor person indeed went to four different places, and got the requisite amount in small amounts; I think it was 1 *d.* at each of the four places.

489. Lord *Talbot de Malahide*.] Have you had any cases of poisoning by arsenic before you?

Many years ago, when I first sat at Worship-street, there was a case of a very young boy poisoning his grandfather with arsenic.

490. Lord *Wensleydale*.] How long have you been at Worship-street?

Ten years.

491. Lord *Somerhill*.] Do you think it would be any great hardship upon that class of persons if you were to require that they should produce from their employers a certificate of their being persons who could be trusted with the use of a small quantity of laudanum?

I think any class-legislation of that sort would press upon them.

492. Do

492. Do you think that such a restriction would act oppressively upon them, or beneficially? J. Hammill, Esq.

It is difficult to say; the question is as to the *bonâ fide* demand of those people; there may be certain occasions of a child being ill, when laudanum might be immediately necessary, and a formula of that kind might be very difficult to comply with.

16th June 1857.

493. Earl of *Hardwicke*.] Supposing it was the law of the land that everybody that wanted to buy a poisonous drug should be obliged to come to a sitting magistrate, and to get from him a certificate, stating that this person was a fit and proper person to purchase such an article; do you think that that would inconveniently increase your business as a magistrate?

I think it would be a great impediment to the administration of medicines in proper cases, because there are few medicines which are not poisonous in large quantities.

494. Would it affect you inconveniently as a magistrate in the administration of justice?

It would be calling upon a magistrate to say whether a medicine should be administered or not.

495. Do you think it would bring many demands upon your time?

I hardly feel able to answer that question.

496. Lord *Somerhill*.] The magistrate of course would not give certificates to persons that he did not know personally?

Perhaps I do not know a single person in the district to which I go, in Worship-street, so that it would be encumbered with delay and difficulty. I should say that there is less poisoning in Worship-street by people who intend to commit suicide, because there is a canal in the district, and they generally have recourse to the water.

497. Are there any suggestions that you wish to make to the Committee, except what you have mentioned as to laudanum?

Not any.

The Witness is directed to withdraw.

Ordered, That this Committee be adjourned till Friday next,
Two o'clock.

Die Veneris, 19^o Junii 1857.

L O R D S P R E S E N T :

LORD PRESIDENT.
Duke of SOMERSET.
Marquess of SALISBURY.
Earl of DERBY.

Earl STANHOPE.
Earl of MUNSTER.
Lord TALBOT DE MALAHIDE.

THE LORD PRESIDENT in the Chair.

Evidence on the
Sale of Poisons,
&c. Bill.

Mr. FREDERICK CRACE CALVERT is called in, and examined as follows :

Mr.
F. Crace Calvert.

19th June 1857.

498. *Chairman.*] ARE you connected with any body of persons who have at all turned their attention to poisons?

Yes ; I have been connected with the Sanitary Association of Manchester, who have devoted a good deal of time to the subject of late.

499. Are you able to state whether that association has paid any attention to the Bill which is now under our consideration?

I believe they have.

500. Can you state whether they approve or disapprove of it generally?

I believe they highly approve of it.

501. Will you state what are the reasons which appear to them to make any such measure necessary?

In our working population the facility with which persons can get possession of poisons greatly increases the number of crimes, and also when a crime has been committed, there is a difficulty in tracing where the poison has been bought. In two or three cases in which I have been myself employed as an analytical chemist the case has failed from that very cause, from not being able to prove where the poison had been purchased.

502. Then you think it is an object which the Legislature ought to attempt to gain, to prevent the facility with which poisons are obtained, and to make it more easy to trace the poison when it has been used for murderous purposes?

Yes.

503. Will you state what is the general character of the poisoning cases to which you allude?

There are especially two poisons used. Arsenic and sugar of lead are the most frequent poisons used among the working people.

504. With respect to arsenic, there is an Act restricting its sale ; is that Act insufficient for the purpose of enabling you to trace the arsenic to the person who has sold it?

Entirely ; the pharmaceutical chemists and druggists do not appear to have at all followed out the wishes of the previous Act. I do not think that the law has been sufficiently enforced.

505. Duke of *Somerset.*] Do you mean that arsenic is sold not coloured, as is provided by law?

It is sold not coloured.

506. Then those persons are liable to a penalty for transgressing the Act?

They are.

Mr.
F. Grace Calvert.
19th June 1857.

507. But the Act is not enforced?

No; there is nobody to enforce it, as it appears to me; that is the great fault of many of these measures; the laws are very good, but there is nobody to see that they are carried out.

508. Marquess of *Salisbury*.] Are there not many manufactures where coloured arsenic would be perfectly useless?

Yes.

509. Then in those cases it must be sold without colour?

Of course.

510. And is that a breach of the law?

Not in that case. I believe that the law only says that it is to be coloured when it is retailed.

511. *Chairman*.] Do you think that unintentional poisonings might be, at all events, diminished in number by a legislative measure?

I believe so. I believe that several of the provisions which are in this Bill will meet that purpose by separating the drugs, and making the various bottles of different colours; all those regulations appear to me most valuable; they are adopted in Prussia, and various parts of the continent.

512. Are you able to state any cases which have come under your notice of unintentional poisonings which at all bear upon the question?

Not any special cases, excepting those which I have had occasion to read and notice in scientific records; none have come under my especial attention. I have stated the poisons which are used in our neighbourhood. I forgot to mention laudanum, the use of which is also exceedingly frequent among the children.

513. Is it applied to children with the intention of killing them, or merely as a quieting draught?

For both purposes.

514. Earl of *Munster*.] Is it applied under the name of "quietness," is it not?

Yes; that is where they do not intend to poison. There are chemists and druggists in Manchester who sell as much as 12 and 15 gallons of laudanum preparations weekly.

515. Marquess of *Salisbury*.] Is there not a medicine called "Daffy's Elixir," which is in great repute?

There are several preparations.

516. Those are composed of opium, are they not?

They all contain more or less opium. I may mention that I have recommended to the Sanitary Association of Manchester, that a substance should be used (I believe that a copy of the Committee papers was forwarded to the noble Chairman) called "carbo-azotic acid."

517. Duke of *Somerset*.] You want that to be inserted also?

I believe that it would be a valuable substance.

518. *Chairman*.] What is it made of?

It is an organic acid, which is obtained by the action of nitric acid on various organic substances.

519. Marquess of *Salisbury*.] Is it coloured?

It has three or four different properties.

520. Duke of *Somerset*.] What are you recommending it for?

To be mixed with poisons.

521. To be sold mixed with poisons?

Yes.

522. *Chairman*.] As a colouring, instead of indigo or soot?

Yes. If the Committee will allow me, I will state in a few words the object of it.

523. Will you state its advantages?

Its

Its advantages are its intense bitterness, one grain being sufficient to give an intense bitter flavour to 70,000 grains of water, a gallon of water.

Mr.
F. Crace Calvert.

524. Duke of *Somerset*.] Do you recommend this substance to be mixed with all poisons?

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Yes; instead of soot or indigo.

525. Is it a vegetable substance?

Yes.

526. Would you mix it with arsenic?

I would.

527. Would it not be easily washed out?

No; because the object of it is that its colouring power is so great, that it would require a large quantity of washing; it is not very soluble; it would require a quart of water to dissolve one grain out, and the consequence is, that the arsenic would be dissolved as well.

528. *Chairman*.] Has it not the effect of colouring the skin without affecting the health?

It has. A third property which I might mention is this, that if a person takes this substance three days, and a grain per diem, he gets coloured perfectly yellow, as if he had the jaundice; so that it is a kind of self-detector, if I may so express myself; that is to say, that attention would be drawn to him at once, and a medical man would say, "This man has been poisoned." It has been used for some years past in dyeing silks. I believe that the application of it which I now suggest is partly my own idea.

529. Is it expensive?

No; it is about 5 s. or 6 s. a pound.

530. Duke of *Somerset*.] For the purpose of mixture with arsenic, we have been told that it would be better to mix with arsenic something that was about the same weight as arsenic, so that it would not be so easily separated?

There is no doubt it would be better.

531. It was said that we should mix with it the black oxide of manganese?

You could not, of course, separate the black oxide of manganese with the same facility by washing as you could indigo and soot, which have been proposed; but at the same time, when once put into a vessel with the arsenic, say a teapot or a coffeepot, the manganese would remain with the arsenic at the bottom, or with the tea leaves, and the party taking the poison would not be able to know that the article had been poisoned; there would be nothing to draw attention to it.

532. But it would lead to a detection afterwards, by the dark colour which has been suggested?

In the case of arsenic, detection, I am happy to say, is not difficult; there is no difficulty in detecting the arsenic: the great object in view is to prevent its being taken.

533. Does not the black colour tend to prevent its being taken?

If that black colour would dissolve, and render the liquor disagreeable to the eye, or noxious to the taste, of course it would be so; but I think that a mere insoluble material mixed with the poison would not effect the object which your Lordships have in view.

534. Lord *Talbot de Malahide*.] The colouring of the arsenic, I presume, is chiefly directed against unintentional poisoning, more than against intentional? It is.

535. And you would consider that any substance which combined chemically with an object, would be more effectual than one which merely combined mechanically, such as soot; would this acid combine chemically with arsenic?

It would not. Both being acids, they would remain perfectly mixed together.

536. Marquess of *Salisbury*.] Is this substance prepared from charcoal?

This sample, which I have the honour to lay before your Lordships, is prepared from coal tar.

(37. 5.)

I

537. *Chairman*.]

Mr.
F. Crace Calvert.

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537. *Chairman.*] What other advantages do you consider that it would have as a colouring material?

I have mentioned to your Lordships the taste, its intense bitterness, and also its intense colouring power, the peculiar property which it has to produce a coloration of the human tissues.

538. Would it be as easy for chemists in different parts of the country to procure this substance as it would be for them to procure soot or indigo?

Fully. It is so very easily prepared, that there would be no difficulty on that point.

539. Objections have been raised by the chemists as to the extreme difficulties which would be placed in the way of their business by imposing any of these restrictions, it being alleged that they would, in many cases, oblige them entirely to give up their business. With the experience which you have had, do you think that that would be the case?

I am quite of a different opinion. I think that, as a general rule, it would only require from them a little more care, and their personal attention; whereas at present the matter is often intrusted to the hands of children and women.

540. Do you consider that there is any objection to a certificate being required for a person buying poison?

Not the least; on the contrary, in France, where I was for many years, and was under the French Government as a chemist for about seven years, during that time I had a great deal to do with pharmacy, because I was a member of the Society of Pharmacy in Paris, and am so still. There the laws on poisons are very stringent, and they do not interfere with the general management of the business of the chemists.

541. It was stated rather upon hearsay, that the law with regard to poison was not strictly enforced in France. What is your experience on that point?

Quite the contrary; they are very strict indeed.

542. And as far as you are aware, no difficulty has arisen from those restrictions having been imposed?

Not the least.

543. *Duke of Somerset.*] How are they very strict; who enforces the law which produces that strictness in France, which you say is wanted here, because the law is evaded?

The pharmaceutical chemist is liable to be brought before a court of law, and to be sentenced, which has been the case. In this country, in most cases, there is an excuse found; they almost always find some means of letting the party, who has been selling these poisons inadvertently, escape. On the continent they are very severe. I could bring before the Committee books, which would show that the parties offending have been condemned to imprisonment for years. The next point is, that the pharmaceutical chemist in France is under the surveillance of a select body appointed by the Government to inspect twice a year the whole of the pharmacies, to see that all the drugs are in a proper condition for being administered; and those persons are the parties who also see that the poisonous substances are under the proper regulations made by the law.

544. As you have had seven years' experience in France, can you state how a person who wanted a little opium in a town would proceed to get it; what it would be necessary for him to do?

I can speak from personal knowledge; you are obliged to go to a medical man, and get a paper stating it.

545. In the first instance?

Always.

546. Before any shop-keeper will give it to you?

Yes. When I was in Paris last year, I was ill, or felt very unwell with a cold, and I went to a shop, and asked for a little laudanum; the pharmaceutical chemist asked me if I had an order; I said, no, I had not, for I had just arrived from a journey, and had not had time to get one; he said "I am sorry to

to say, sir, that I cannot give it you ; I will give you three or four drops willingly in a solution, but I cannot give the quantity that you ask me for." I asked for an ounce, and I was distinctly refused.

Mr.
F. Crace Calvert.

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547. Would you recommend such a severe law as that to be enacted in this country?

I do not see the inconvenience of it.

548. You do not think that people would object to it?

I do not think that the people would; I think that the pharmaceutical chemists would.

549. Do not you think that the public would do so; the people who take opium in its various forms?

It would perhaps be a very good thing; it would prevent many people being slowly poisoned, who are now indulging to a very severe extent in taking opium, to the detriment of their health.

550. *Chairman.*] Of course not objecting to the requirement of a medical certificate, you would not object to a certificate from a householder?

Not at all; it is not necessary to have the certificate of a medical man exactly, nor is it so on the continent. In France it is not necessary to have a certificate from a medical man; you may have one from any person attached to the police, or you may go with the keeper of the hotel, who is a known person to the chemist and druggist, and then the chemist and druggist will give you the laudanum, or any other substance, because you are no longer a stranger: he recognises the person whom he is probably acquainted with, and knows that the purpose for which you are going to use it is an honourable purpose.

551. *Duke of Somerset.*] Many articles which are poisonous, are wanted for the purposes of trade; how does a poor Frenchman get them?

There is no restriction if the poison is employed for trade purposes.

552. If he wants a little arsenic for trade purposes, he can obtain it?

He must buy a certain quantity, and he must go to the proper shops, which are wholesale shops, and then of course it is entered in a regular register, and it is delivered for the purpose. The provision does not interfere with the wholesale; it is only for the retail.

553. Then, a poor man can get such a quantity as he wants for his trade? even a small quantity, I suppose?

I should say he could do so, because in that case it would be considered a commercial transaction, and the party from whom he would be buying it would know him.

554. Then he having got it, what security is there that it is not given or sold to anybody else who wants to get it from him?

There is none; you cannot prevent poisoning; you can only restrict the facility of poisoning.

555. Do you think that in France the strictness of the law has prevented poisoning?

There is not a doubt of it in my mind. I can give the reason why I draw this conclusion. As a professional chemist, I read a great number of scientific books from France and Germany, and books published in England. If you compare the number of cases of poisoning which come under notice in reading, it is very rare that you see any case recorded in the scientific French books. In our English books it is repeatedly the case. If you take the *Pharmaceutical Journal*, a well-known publication in England, you will find such cases there recorded very often. I should say that in every number there are some cases of poisoning, either by one kind of substance or by another kind of substance. If you take the *Journal de Pharmacie*, which is a journal exactly similar, it is seldom that you find a case of poisoning there recorded.

556. *Lord Talbot de Malahide.*] You allude to accidental poisoning, I suppose?

Both accidental and intentional.

557. *Duke of Somerset.*] You have alluded to those poisonings which are recorded in the *Pharmaceutical Journal*?

Yes, I am taking the *Pharmaceutical Journal* as an example.

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558. As an example of what is going on in this country?

Yes.

559. That applies, of course, to the three kinds of poisoning, to intentional poisoning, to suicide, and to unintentional poisoning?

Yes; that journal takes up those cases from various periodicals and journals; it condenses them, and brings them under the notice of the reader.

560. What precautions are there in France against unintentional poisoning with regard to chemists; are the poisons kept in any particular bottles, or locked up in any particular cases in the shop, or in what way are they kept?

That is not done in France; in Germany it is so.

561. Supposing a shopman is present, and the head man of the shop is not present, the shopman, I suppose, can equally serve out the poisons?

Of course he can serve them as well as the master upon the proper document.

562. But he must have the proper document given him?

Yes, or he is liable personally, and not his master. It is necessary that I should state, that on the continent young men who practise pharmacy undergo very severe examinations. They are obliged to be attached seven years to a chemist and druggist, and besides that, they are obliged to follow three years' lectures, and undergo a certain class of examinations. The pharmaceutical body in France is a very superior class of men; and some of the leading scientific men of France have been pharmaceutical chemists. In this country I suppose your Lordships are aware that that is not the case.

563. That applies to the head man of the shop; but what is the case with regard to the shopman who is under him?

He must have a proper diploma of qualification before he is allowed by the law to serve out drugs, or to make any kind of preparation.

564. Will you state to what articles in France this law applies; what do they call poisons in France?

I believe that there is not in France any special list; in fact, I am certain that there is no special list. They leave it to the knowledge of the pharmaceutical chemist to decide whether the dose and the quantity which is given is capable of destroying life.

565. If a person goes to a shop, and gets a very small quantity of a poison, which in a larger quantity would destroy life, he may get it without any certificate?

Yes.

566. Then he may go to another shop, and equally get a little without a certificate again, I suppose?

Yes; and that has been the case in one or two instances which are known, and persons who have been determined to poison themselves have arrived at it by that means.

567. Or, in order to poison somebody else, they may do it?

Yes; but I only know one or two instances of the use of laudanum. You will find them recorded, some few years ago, in the "Journal de Pharmacie." The party proceeded according to that system. He went, I think, to a dozen shops, and got three or four drops from one, and three or four drops from another. You cannot prevent poisoning. As I have stated, the object in view is to try and prevent the easy access to poison, and the opportunity of a low class of people especially getting with facility poison which they use.

568. *Chairman.*] To prevent suicide particularly is quite impossible? Entirely.

569. But it would increase the difficulty, and increase the chances of detection, if a man was obliged to go to twelve different shops to purchase the dose necessary, would it not?

Quite so; and it also might be that he might be known, or there might be some

some clue, because in a man going to twelve shops, first of all there is a chance that one of those parties would recognise him as a person who came to his shop for a certain quantity of poison.

570. Marquess of *Salisbury*.] You stated in the beginning of your examination that there were a great many cases of poisoning at Manchester?

There are at Manchester, and among the neighbouring population.

571. Do you believe that to be intentional poisoning, or accidental? Intentional in a great number of cases.

572. Do those ever come before the public in the shape of trials? Yes.

573. Many of them?

I should say that every year there are about two or three cases which come regularly before some court of law, either at Chester, or at York, or at Liverpool. I myself have been in several cases.

574. There are about two or three cases of poisoning in the course of a year in the northern manufacturing districts?

Yes; but you must bear in mind, that the number of cases in which the evidence can be so far collected, and the whole of the case, so well arranged in a legal point of view, as to justify bringing prisoners up to trial, is few compared with the real number of poisonings which take place.

575. Upon what grounds do you state that?

I have been attached to the Medical School of Manchester for six or seven years as a lecturer on chemistry, and I have twelve colleagues. Most of these colleagues, I think, if they were to see a case of poisoning, unless they saw it quite clear, and they thought in their minds that they could really make a case out, would not notice it; and I think that is the case with most medical professionals.

576. Then those cases have not generally come before the notice of the public?

No; I am only saying that the cases which come before the public are a small number of those which really take place; that is my impression.

577. Is the intention usually to destroy life, or to procure abortion?

I think both; that is only my impression; I do not state that it is so.

578. *Chairman*.] You have already stated your opinion that no difficulty and embarrassment to the chemist ought to be occasioned on requiring a certificate, and that you think that it would be an advantage to the public as a safeguard to them, and would not produce any individual inconvenience. Have you considered the other restriction of this Bill, namely, the necessity of selling the poisons in bottles of a particular shape?

My impression is, that that goes a little too far. I do not think that it is necessary to carry it quite so far as that. But I think that the provision of the Bill which makes it a duty to separate those substances which are of a decidedly poisonous kind from those which are less so (for all substances may be considered as poisonous in certain doses), is a great improvement.

579. There is one objection which has been made to it, which is, that some of the objects which are particularly of a most poisonous character, and which are most often used for poisoning, are in constant use; so constantly in use, that the poison closet would be perpetually open?

I think that they might be put in a different part of the shop. I think that at the present time it is to be regretted that they mix up those poisonous substances with others; it is exceedingly easy for a person to take a bottle by mistake one for the other. Your Lordships are also aware that very few of these pharmaceutical chemists have really the necessary knowledge and talents (I am sorry to say so) to judge of the quality of their own drugs, because in this country a young man goes into a shop, and, excepting within these last few years, during which there has been a Pharmaceutical Society established in London, and one just beginning in Manchester, these young men have not the slightest opportunity of getting any scientific knowledge. They simply know the drug by its appearance, and we know that there are a great number of

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drugs which are similar in appearance, such as sulphate of magnesia, which is not a poison, and sulphate of zinc, which is a violent poison; those two drugs are perfectly identical to the eye. Sulphate of potash is comparatively innocuous; oxalic acid is a violent poison, and I could cite a great many instances where, as far as the eye can judge, unless persons paid especial attention to it, they would certainly take the poisonous substance as well as that which is not so. Therefore the provision of the law, if carried out as far as practicable, would certainly tend, I think, to decrease these cases of accidental poisoning, which takes place from oversight or from carelessness.

580. Of course, after the recommendation which you have made of a certain substance being used to colour the poisons, you are of opinion that they should be so coloured?

Most decidedly; I do not at all say that the substance which I have recommended to your Lordships is the best, but I think that something of that kind would be of great advantage; or, that it should be added to such poisons as are not from the prescription of a medical man, or which are not for any commercial purposes, as, in fact, the Bill provides for. I think that a casual person coming in, and asking for any poison, should not receive it without its being coloured.

581. Duke of Somerset.] Would you mix a substance like this with liquids as well as with solids?

Quite so.

582. With everything?

I believe so.

583. Suppose that a person wants a poison for the sake of photography, and that he can only buy it mixed with this substance?

A case like photography does not meet at all the peculiar case, because in the case of photography, it is for commercial purposes. If a person wants drugs for photography, he will comply with the restriction of this law; he will bring two witnesses first of all, and if it is for anything like photography, the parties will soon know that it is for photography.

584. Chairman.] Is there not a provision in the Bill before us which would enable a person, upon the fact being stated in the certificate that the poison was wanted for a purpose for which colour was inapplicable, to procure it in an uncoloured state?

Yes, I think that that could easily be met.

585. Earl Stanhope.] Would not your suggestion tend very largely to increase the stock of articles which it would be necessary for a chemist to keep; I understand you that of all articles of a poisonous kind there should be two sets, namely, those wanted for casual customers, which might be used as poisons, and those which were required for commercial purposes; therefore the chemist must have two sets of every article?

I do not think that there would be that objection. Poisonous substances, either for commercial purposes or for any purpose of that kind, should not be coloured in any shape or form, but the party buying the substance would come under the provisions of this Act if it was not for a commercial purpose or a medicinal purpose, but required for mere ordinary purposes. For example, take the case of arsenic; in that case the pharmaceutical chemist would add to such poisons a certain quantity of colouring substance.

586. You propose that he should colour the poison on the spot?
At the time.

587. Duke of Somerset.] You said, I think, that the Arsenic Act is neglected because it is no one's business to enforce the Act?

It appears to me to be so.

588. Supposing that this Act were passed, the same case would arise again as the Act stands, would it not; whose business or interest would it be particularly to enforce it?

I think that that is the great defect of many of the laws which are made, that there is nobody to see that they are carried out. I think that that is the case here;

here; that is why I mentioned it. I think that there ought to be a proper officer attached to the corporation, or attached to any legal body, which your Lordships may think advisable, whose business it would be to see that this Act is carried out.

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589. Then you would have particular officers throughout different districts in the country to look after the Act when it had been passed?

I think that in a great number of cases there are proper persons already appointed, if they were included in this law. For example, a Board of Health officer is a proper person to see it carried out; in our borough districts the sanitary officer would be the proper person. In many places in England the officer is already appointed; in other places the chief constable or some legal person could be appointed to see that the provision is carried out.

590. As far as I understood your explanation of the French law, there is no schedule there of poisons; there is no list of articles which are specially called poisons by the government?

None.

591. Every chemist sells what he pleases, but it is on his own responsibility? Yes.

592. And in case of his having sold a poison without a proper certificate, he would be visited with a very severe penalty?

Very. He would be most likely broken, and prevented from ever being a pharmaceutical chemist again. The laws are exceedingly severe. I know one case which took place in St. Malo, in Picardy, where the man had given a larger dose of oil of bitter almonds than he knew should be given, and such as might prove fatal. The person died, and the chemist was imprisoned for several years; I forget the number. There is another case to show how severe the law is in France: I remember one case where a label was mistaken; an external lotion was given, instead of an internal draught: in that case the man was imprisoned for three or four years.

593. As an analytical chemist, are you at all cognizant of persons in the country who go about collecting herbs, and selling them?

I know that there are such persons.

594. Do not they frequently collect herbs which are very strong poisons?

Very frequently; but I have had no instance come to my notice where they have been used with the intention of destroying life.

595. Many of those poisons are of such a nature that the detection of them is more difficult than with many of the mineral poisons?

A great deal.

596. Should you not be afraid that, if we made a stringent law upon the chemist in the town, there would rise up another set of persons of a much lower description, who would deal in many of these drugs which were forbidden, or which were checked and restricted in the case of the respectable dealers?

It is only my impression; I have no means of judging; but I should say that in that case the party wishing to commit a crime, would not know very likely that this party had herbs of that peculiar kind. It is not natural for those persons to think of such a means; they might of course employ it.

597. You spoke of having read the Pharmaceutical Journal?

Yes.

598. Have you not read there of cases where itinerant vendors go about and sell things in the market, and even that they have announced to women who have come there that though they had not any savin that week, they will have some the next week?

Yes, I know that perfectly well; but the cases are comparatively rare; there are in our districts persons who sell to women drugs, not perhaps for the purpose of poisoning their husbands, but certainly of injuring their health: that is an exception to the rule. I should not like to accuse the whole of the pharmaceutical body on account of the low conduct of a few parties.

599. I do not apply this to the pharmaceutical body, but to persons of that
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sort who go about, of whom I have read in this journal, called the "Pharmaceutical Journal"?

Yes, there are a class of people who go about the large towns, and they give lectures, and so on; they are a very objectionable class of people.

600. Considering the large quantity of opium which is consumed in this country, and consumed, as we are told, by the manufacturing, and in some cases by the agricultural population, do you think that if that restriction which you propose to make to prevent its sale were made, these itinerant vendors would not be found to let the poor people have it in that illicit manner?

I believe that if they were vendors of drugs, which they must be, they would come under the liability of this Act, and therefore you would prevent their selling those drugs, as you would prevent any pharmaceutical chemist from doing so.

601. *Chairman.*] If it is a very profitable trade, is there anything to prevent the herbalists now enlarging their stock in trade by opium; they can do it now without any restriction, and you must connect them in some way with intentional murder, in order to inflict any punishment at all upon them after the murder has been committed; would it not be desirable to have some restrictions of this sort in a legislative Act, which would make them liable to punishment if they supplied this drug in any way whatever, without the requisite precaution?

Of course: the law, I think, should be so made as to comprise every class of vendors of any description; any person vending drugs or herbs, or any substance which may prove injurious to man.

602. *Lord Talbot de Malahide.*] Do you consider, or do you not, that there can be any security against unintentional or accidental poisoning, as long as any uneducated person can sell or dispense poisonous drugs?

I think that it tends especially to increase it; that the great object which the legislators of this country should keep in view should be, to enforce gradually upon the pharmaceutical rising generation of this country the same regulations, or similar regulations, as those which have been enforced upon them in France and Germany. I think that it is disgraceful to our nation to see the state in which pharmacy is generally carried out in this country. The chemists sell drugs, and very few indeed have a knowledge of them. I will take Manchester, because I have been there now 12 years. In Manchester there are not more than five or six chemists and druggists in all the town who, if you took any substance out of their pharmacy, and asked them this simple question, How is this prepared, or is it pure? would know. I can give your Lordships an example. Last year I was examined before the Committee of the House of Commons on the adulteration of drugs and food. I got the secretary of the Sanitary Association in Manchester to buy 140 drugs out of 12 good shops in Manchester. I analysed those drugs. I forget the figures, but I think there were 108 or 110 out of the 140 which were not of that degree of purity which is prescribed by the Pharmacopœia of this country.

603. *Duke of Somerset.*] You are acquainted with the French law; are you acquainted with the law of Germany at all?

I am not. I am an honorary member of the Society of Pharmacy of Paris. If it was interesting to your Lordships to have any information, I should be most happy to get it for your Lordships, in the shape of official documents bearing upon the law.

604. The French system would be totally inapplicable to this country, as, according to your statement, the chemists are far too little educated to be fit to be entrusted with that sort of law?

Quite so. You cannot make the law so severe or so stringent in this country as it is in France, because the men are not prepared with the knowledge to meet it.

605. We must first educate our chemists before we can do it?

Yes, before you can be so severe with them.

606. *Chairman.*] Are there any observations which you have to make on the amendment of the Bill?

I should

I should simply suggest, that the provision which appears to me rather too stringent is the one about the bottles; I think it interferes too much. I would also suggest a clause, as I have stated, to see that the Act is carried out.

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607. Have you looked at Schedule A. and Schedule B.?

I have.

608. Do you see any objection to them?

No. The question of a list is very doubtful. It may have some advantage with many of the druggists, principally in the little villages and little towns. Perhaps it may draw their attention to the fact that these preparations are dangerous; they may not be aware of it: that is the only advantage.

609. Duke of *Somerset*.] You will observe that there are a great many articles which are not included in this schedule which are equally poisonous with those articles which are included?

Quite so. And that is what I state, that I do not think that a list can comprise the poisons, and also that it is difficult to define really what is a poison, because a substance becomes poisonous according to the proportion taken.

610. *Chairman*.] Do you consider lobelia to be a poison?

It is very doubtful. I had a case of a woman, near Oldham. This woman was complaining of a violent pain; one of the herbalists went to her, and gave her a dose of lobelia, but it was mixed with too large a quantity of Cayenne pepper, and the poor woman staggered for half an hour, and died. Her stomach was brought to me, and I examined it. So little was known of lobelia, that I got some lobelia, and gave it to dogs, and gave it in large quantities, but the dogs did not die. So that it is very doubtful whether lobelia is a poison. The amount of information which we possess upon it scientifically is so very limited, that I am not justified in giving an opinion. It is toxic, but its influence is limited. It is used a great deal by the herbalists; it is one of the favourite medicines.

611. Lord *Talbot de Malahide*.] You have herbalists in France also, have you not?

Yes.

612. Are they under any restrictions?

They are exactly the same as the others; but they are not forced to pass such examinations. They cannot sell anything but herbs; not drugs; not what may be called medicines.

613. Are they obliged to take out a licence?

They are.

614. *Chairman*.] Have you any other suggestions to make which you think will be useful to us in the consideration of this Bill?

I think not. I think that the Bill includes all that can be wished, and I think, as I said before, that it cannot be made much better, in my own humble opinion.

615. Duke of *Somerset*.] Would you keep the schedule as it is, neither increasing nor diminishing it?

I think that it would be advisable to increase it; on this plea, to draw the attention of the pharmaceutical body of this country to these preparations being poisons. The amount of ignorance of these parties is so great as to the nature of the drugs which they use, that it is rendering them a service to tell them that a substance is a poison: therefore, I think that that provision would be very useful. I will take a town as an example: there is a place called Blackpool, in Lancashire; there are two or three chemists and druggists there; at one of those shops a woman serves. Whenever I have been in the shop, a woman has always served me. I am certain that if she has any knowledge of the subject, it is exceedingly limited. I believe that she buys these drugs labelled. A vendor from London comes, and she buys a certain quantity, and fills her bottles. I have several times asked her some little questions when I have been in her shop; but she is perfectly unacquainted with the matter; she has a regular shop

616. Do not grocers and other people also sell poisons as well as chemists?

I am sorry to say they do; it is to be regretted. On the continent they are not allowed to do so.

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617. You say that you would add other articles to the schedule?
I think so.

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618. While you were telling the chemists what were poisons, you would be also telling the other people who wanted to use poisons what were poisons?
There is no doubt of that.

619. Would there be an advantage or a disadvantage in that?

I think that there would be an advantage, on this plea, that the Bill would be read by those who had to be affected by it, and would not be read by the whole of the public. Many people have no idea what aconite is, for example. They have the aconite bottle in their collection, and the Act would say to them, this bottle of aconite is poison.

620. Then you would not put the label "poison" on the bottle?

Not in the shop; it would only be the special character of bottle which is mentioned.

621. I thought you said that you would not have a special kind of bottle; that you thought it unnecessary?

I would in the shop, but not to retail; there is a bottle in the Bill to be of a particular kind when the poison is sold out. I think that is going rather too far; but I think that the bottles being kept separate in the shop, or coloured, would be advisable, on the plea which I have stated, that it is so easy to make a mistake.

622. *Chairman.*] Where did you receive your chemical education?

I was 10 years in France; I was two years in Normandy, and then I was appointed assistant to Monsieur Chevreul; then I was assistant at the Jardin des Plantes for five years; then I was chief analytical chemist of the Jardin des Plantes for two years; then I came back to England, my own country, and I have been in Manchester now 10 or 12 years, and am attached to the Royal Institution.

623. Lord *Talbot de Malahide.*] Are you a native of Manchester?

No, I am a native of Tooting; I was 16 years old when I went to France, and I came back when I was 28. I married a French lady, and I have three assistants who are Frenchmen, so that I have not lost the French accent.

624. Earl *Stanhope.*] Can you give us the date of the French law, which you have described, on this subject?

I cannot.

625. Lord *Talbot de Malahide.*] Is it to be found in the Code Napoleon?

It is since then; I believe that it has been within the last 10 years that there have been new regulations made. It is partly law, and partly under the Conseil de Salubrité in Paris, which is composed of some of the leading pharmaceutical men, and also some of the medical men of Paris, who together make regulations; those regulations go from them to the Minister of the Interior, and then the Minister of the Interior sends those regulations to the préfets in all the departments, and they see that the law is carried into effect. The Conseil de Salubrité is, in fact, what the Board of Health is in England; it looks after the sanitary state of both country and town.

The Witness is directed to withdraw.

Mr. W. Wilson.

Mr. WALTER WILSON is called in, and examined as follows:

626. *Chairman.*] WILL you state what opportunity you have had of considering the subject of poisons?

For the last two years, and more particularly for the last 18 months, my attention has been directed to the subject generally. My attention was called principally to the state of the law with reference to the very numerous cases of poisoning which had taken place; it occurred to me that something was necessary, and I devoted my leisure hours for the purpose of devising some plan which I thought would meet the exigencies of the case. In pursuance of those

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those views, I considered the subject, and have reduced them into a pamphlet form; I have also looked at the Bill as it has been brought in by the Government, and I have gone through it carefully, and it appears to me in some respects to be objectionable, and in other respects to be based upon sound and proper principles. It occurs to me that the whole tenor of the Bill, so far as the regulation of the sale of poison goes, should be conducted upon a different principle than what is set forth in the Bill. I submit that a Bill like that brought in, which is severe in its measures, and stringent in its regulations, is not so well adapted to meet the object, as a Bill which is moderate in its regulations, but which has an executive or an efficient administration for the purpose of seeing that the Act of Parliament is strictly enforced.

627. What is the machinery which you would suggest for that purpose?

I should suggest that the sale of poisons should be under the control of the Board of Excise, something similar to the sale of beer, the sale of tea, and the granting of licences, and that no person should be permitted to sell any poison to be specified in the schedule of the Act without first having obtained a licence to sell.

628. Would that licence be obtainable according to your plan by a money payment, or would it be subsequent to any examination as to the fitness of the person applying for it?

I should simply make it, according to the present state of the law, with reference to the sale of poisons, because I think that to interfere with the present system, which has been carried on so long, would be an infringement on those principles upon which the Legislature have permitted the sale of poisons to continue, and that it would not have a proper regard to the interests of those persons who are carrying on the trade and business of chemists and druggists.

629. Earl of *Derby*.] Then, what security would the Excise licence give you against the improper use of poisons?

The security would be this, that no person could sell poisons except he had obtained a licence, and that licence must of course be renewed annually, and at the same time all poisons which were sold must be subject to the same provisions and regulations as to entry in a book, and the attestation of a witness, as provided for by the Bill.

630. Lord *Talbot de Malahide*.] You would have no educational test as to those parties to whom you would entrust the custody and dispensing of poisonous drugs?

I think not, at present. I think that at present it would be rather too severe a test, and that it would interfere with the general principles upon which the trade of a chemist and druggist has been permitted to continue.

631. Duke of *Somerset*.] You suggest that no person should be allowed to sell poisons without a licence; how would you define poisons for that purpose?

I would leave that entirely to persons who are better acquainted with poisons than I am; the poisons should be specified according to the schedule of the Act.

632. Do you mean that you would put in every poison in the schedule of the Act?

Yes, every poison which is restricted; I should do so to all intents and purposes, as is done in the Act.

633. Earl of *Derby*.] Would not the practical effect of that be to require a licence for every chemist and druggist; are not the substances which may be poisonous, and which are necessarily mixed up in various preparations in every chemist's shop, so numerous, that by requiring him to have a licence to sell any of these poisons you would, in point of fact, debar any one from dealing in drugs without a licence?

As a rule that would be so.

634. Lord *Talbot de Malahide*.] Then, the only check which you propose would be the sum paid for the licence?

No; I think that the limitation of shops should be a consideration, and that by having the licences confined to persons who would be subject to the dis-

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cretion of the Commissioners of Excise, they would then have a discretionary power to increase or to decrease the number of licensed persons according to the requirements and wants of any particular place; and the sale of poisons which should be mentioned in the Act, should be regulated by the same conditions, as regards the sale of poisons, as are already specified in this Act.

635. Then, according to the demand, supposing there was an increased demand for poisons, you would increase the number of shops?

No, not exactly so, but in proportion to the number and the increase of chemists and druggists; it would also be an indispensable condition that they should obtain a licence previous to the sale of poisons.

636. Earl of *Derby*.] Then you would leave a discretion in the Board of Excise to refuse the licence, not with reference to the character of the person, but with reference to the number of druggists' shops already established?

Yes.

637. *Chairman*.] What do you think are the principal reasons which make it desirable that there should be a legislative measure restricting the sale of poisons?

I think that the present law requires alteration in this respect, that the sale of poisons is a free-trade question, and that it requires checking; that persons practising as chemists and druggists permit unqualified assistants and boys to dispense the poisons, thereby occasioning mistakes and accidents.

638. Duke of *Somerset*.] Would you compel every one who sold poisons to take care not to employ anybody unless that person had been properly educated?

So far as the sale of direct or active poisons is concerned, to be mentioned in the schedule, I should have it in these words, "that no person should be permitted to sell, excepting the principal, or a person of not less than 20 years of age."

639. Then you would take the test of age?

As an ordinary principle, I should.

640. In order to secure sufficient knowledge?

An apprentice not under the age of 20 years.

641. And you would give the whole power to the Excise to consider who should or who should not in every town and village have a licence?

I should.

642. Earl of *Derby*.] Do you propose to give a corresponding power to the Excise to withdraw a licence in the event of proved incompetency, or carelessness?

I should, upon the same principle as in the Bill.

643. Then practically you would give the Excise the power of preventing every man who was a chemist and druggist from exercising his calling?

If he violated the Act: it should not be, of course, in the discretion of the Commissioners of Excise to do it; but the Act in certain terms should express, that if he did certain things, or violated the Act in certain ways, then he should forfeit his licence.

644. You have said already that the forfeiture of the licence would be equivalent to the deprivation of his business?

So it would.

645. I mean of his business as a druggist, irrespective of the sale of poisons; that no man practically could carry on the business of a druggist without having the power of selling poisons?

He could not.

646. Therefore his business as a druggist would be taken from him by the action of the Excise, upon any carelessness being proved with regard to poisons?

I do not say by the action of the Excise, but by his own act; if he did an act contrary to the provisions of the Act, and by his repeated carelessness and neglect

neglect did those acts for which the Act should provide, then he would forfeit his licence by his own act and deed.

Mr. W. Wilson.

19th June 1857.

647. *Earl Stanhope.*] But you propose that the heads of the Excise should be the judges of that?

No, I do not; I simply propose that the Act should contain certain provisions as the Bill which is now before your Lordships, that where a person repeatedly did certain acts, then he should forfeit his licence.

648. Who is to be the judge whether he has or has not, in point of fact, repeatedly done certain acts?

I take that according to the Act itself.

649. In your scheme, whom do you propose to be the judges of the fact whether he has or has not committed such an act of carelessness as shall forfeit the licence?

I do not know that I have considered who should be the person, but I certainly should make it one of the conditions that he should forfeit his licence in case of repeated neglect and violation of the Act.

650. *Chairman.*] Is there any other suggestion which you think it desirable to make to the Committee?

In the 5th clause it is said that "no person shall sell any poison on any pretence whatsoever unless the sale be made to a person of full age." I think that that ought to be restricted to male persons of full age; as it is, it leaves it open to females; and, according to inquiries which I have made, I find that the proportion of females who obtain poison, and who commit acts of suicide, or other violation of the law, is very much greater than that of males.

651. *Earl of Derby.*] Among the poisons for the sale of which you would require a licence, do you include opium?

Yes.

652. Would you desire that any other restrictions, besides the possession of the licence, should be imposed upon the sale of poisons, such as requiring them to be kept in a particular place, and to be kept in coloured bottles, or any precautions of that kind?

Certainly; I should have the whole of those clauses which are in the Bill continued; but I think that the great disposing power should be left with the Excise, for the purpose of seeing that the Act is fully carried out, and that proper persons are appointed for the purpose of selling drugs.

653. Then you would desire to retain all the precautions and restrictions which are introduced into the present Bill, and to superadd to them the necessity of a licence?

Yes, with the exception, I might state, of the provision with regard to a medical certificate, and a certificate by a clergyman and by a justice of the peace; that I consider unnecessary.

654. *Duke of Somerset.*] You consider any certificate unnecessary?

Yes.

655. Having a licence?

Yes; I think that the responsibility ought to be thrown upon the person who receives the profit; that he ought to bear the burthen.

656. The decision of the Excise, as I understand you, is to be absolute; for instance, in the town of Leeds, where, as we have heard, there are an immense number of chemists, the Excise would have absolute power to consider how many chemists' shops were required, and to withhold a licence in respect of those shops which they considered were not required?

No; I would not apply it to those shops already in existence by any means. I should not interfere with one person who was in business; but that in the sale of poisons, so far as the future is concerned, the licences should only be granted to such persons according to the requirements of the place as the Commissioners of Excise might deem reasonable?

657. I thought you meant that the Excise were to judge of what the requirements of the place were?

Yes, so they are.

(37. 5.)

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658. Hereafter

Mr. W. Wilson.

658. Hereafter?

19th June 1857.

Yes; I simply throw it out as a suggestion, not as a principle to be relied upon. I would not interfere with any of the chemists and druggists who are now in business.

659. Earl of *Derby*.] Except so far as to subject them to the operation of this Bill?

Yes; I may also add there is one suggestion I wish to make; I see that there is no clause for the recovery of penalties, or their application, in the present Bill; but, in order that my views as to granting licences may be better understood, I may observe, that I propose that the Act should not only have a present, but prospective operation, as follows:—

1st. That every person practising as a chemist and druggist at the passing of the Act should be entitled to and receive from the Commissioners of Excise, on application by him, a licence to sell poisons.

2d. That until the expiration of three years from the passing of the Act the Commissioners of Excise should, in their discretion, grant a licence to any person whom they may think fit and proper persons to sell poisons.

3d. That at and after the expiration of three years from the passing of the Act no person should be entitled to receive a licence unless he shall have previously obtained a certificate from some recognised body of pharmacians certifying as to his ability and fitness to sell poisons, and practise as a chemist and druggist; and that any person obtaining such certificate shall be entitled to receive from the Commissioners a licence at any time on application for that purpose.

I also propose that the sum to be paid for a licence should be moderate, say 10 s. 6d. per annum, which would realize a sum sufficient to pay the expenses incurred by reason of the extra duties devolving upon the Excise department; and that the officers of Excise should have power to visit the shops of the vendors personally, to see that the provisions of the Act are carried out, and to take proceedings and other measures for enforcing the provisions of the Act, in the same manner as they are now authorised to do in other cases pertaining to the Excise. I believe that an Act based upon the principles which I have suggested would meet with the general support of the great body of respectable chemists and druggists in the country.

The Witness is directed to withdraw.

Ordered, That this Committee be adjourned till Tuesday next,
Two o'clock.

Die Martis, 23^o Junii 1857.

LORDS PRESENT:

LORD PRESIDENT.

Duke of SOMERSET.

Marquess of SALISBURY.

Earl of DERBY.

Lord SOMERHILL.

Lord TALBOT DE MALAHIDE.

THE LORD PRESIDENT in the Chair.

Evidence on the
Sale of Poisons,
&c. Bill.

WILLIAM THOMAS BRANDE, Esquire, D. C. L., F. R. S., is called in,
and examined as follows:

*W. T. Brande, Esq.,
D. C. L., F. R. S.*

23d June 1857.

660. *Chairman.*] IT is almost unnecessary to ask you to state your qualifications for giving opinions on chemical matters?

I have been Professor of Chemistry at the Royal Institution a great many years; and I have been also Professor of Chemistry to the Apothecaries Company, which I believe is the principal cause of my coming here.

661. Have you paid any particular attention to the subject of poisons?

I have, at one time, a great deal.

662. Have you been often called upon to give opinions in criminal poisoning cases?

Not very frequently; they are generally more medical than purely chemical questions.

663. Have you had an opportunity of considering the Bill now under consideration?

I have not seen it.

664. Have you had an opportunity of knowing that there exists a good deal of evil in the present system of indiscriminately selling and dispensing poisons?

I believe there is no doubt about it.

665. Have you formed any opinion of the best mode of correcting that evil?

I have seen a good deal of the mode adopted at Apothecaries Hall, where, I believe, no accident of any consequence has ever occurred; it consists in not selling any poisons indiscriminately, but in requiring that they shall be sent for by a medical man, or by some manufacturer, or other person who is known as such to the persons employed at Apothecaries Hall.

666. Would they refuse to sell poison to any individual unless he came to them under those two conditions?

I think they would furnish laudanum or opium, or its preparations, in common cases; but if anything occurs to excite suspicion, which sometimes happens, they refuse it.

667. Have they any particular mode of conducting their business in this respect other than what is usually adopted by chemists who are well to do in trade; have they any mode of keeping their poisons separate from other medicines?

They keep their poisons separate from the other commonly used preparations in the dispensing department.

668. Do you know whether there is any practical inconvenience arising from that practice?

None at all, I believe.

*W.T.Brande, Esq.,
D. C. L., F. R. S.*
23d June 1857.

669. Can you form any opinion as to whether there would be any general practical disadvantage in requiring a certificate of some sort or other from persons who come to purchase poisons, and who are not known to the chemist, and do not bring with them medical prescriptions?

None at all, I think. I believe that if any person were to apply at Apothecaries Hall for any common poisonous substances, unless he brought a prescription or an order from a medical man, or an order from some manufacturer who is in the habit of dealing with them, they would generally refuse to serve the poison.

670. Do you think that that system would be applicable as a compulsory regulation with reference to chemists in general, or to those who deal in these poisons?

I presume that there would be no difficulty in it; I think it is very objectionable to allow poisons to be sold indiscriminately as they now are, especially in small country towns. It appears that a variety of poisonous articles are usually sold by people who keep miscellaneous shops, where they sell almost every thing.

671. Earl of *Derby*.] Admitting the evil, how would you provide for the sale of poisonous drugs which may be in some cases necessary to be used in those small villages?

I think that I would prohibit their sale by parties of the description I have just adverted to.

672. *Chairman*.] Do you mean by some system of licences?

That they must either go to a neighbouring large town, or to some licensed person, or to some other proper source.

673. Duke of *Somerset*.] Do you mean that you would prevent shops which you call miscellaneous shops from selling those poisonous drugs altogether?

Certainly.

674. Taking the small towns and large villages of this country, would not such a regulation as that be attended with very great inconvenience?

I can hardly answer that question from experience, but I should think not; I should think that, except in very small places indeed, there would be some person who might be entrusted with the sale of poisons, and who, from his education or position, would be a fit person to sell them.

675. If I understand you, you would not allow the miscellaneous shops to sell them?

No.

676. Then supposing, as is often the case, that there is no chemist in the village, would you allow no one in the village to sell these drugs at all?

Certainly not.

677. Earl of *Derby*.] In the case of certain common poisons which may be required for every day's use, such as opium, oxalic acid, and poisons of that sort, would it not be a great inconvenience to the inhabitants of the village to have to go to a town many miles distant before they could procure them?

I think with regard to opium that might be the case, but not with regard to oxalic acid.

678. Is not that an article that is constantly in use for ordinary domestic purposes?

It is, a good deal; but there are other substances which might be substituted for it.

679. *Chairman*.] I do not quite understand your proposal; would you limit the sale of poisons to druggists, or would you have a licence given, after examination, to all persons who chose to present themselves as wishing to sell poisons?

I have not maturely considered that subject; my opinion is, that either a properly educated chemist and druggist, or some other properly authorised person, having been examined, or being otherwise known as a proper person to be trusted in such a matter, might sell poison or dispense poison; but I am certainly of opinion that no poison ought to be dispensed by a number of persons who now are in the habit of retailing it.

680. Will

680. Will you have the goodness to state, if you are prepared to do so, what is the nature of the examination, supposing you were entrusted with the task, to which you would subject a candidate for a licence to sell poisons?

*W.T. Brande, Esq.,
D. C. L., F. R. S.*

23d June 1857.

I think that all persons who have passed the examination which the Pharmaceutical Society adopt would be fit for it, and that all persons who have passed the examination which the Apothecaries Company subject their members to would be fit for it, and that in general persons whom we should call educated people in these several lines, might be entrusted with the sale of poisons.

681. If it be the fact, as has been stated, that there are in the whole country about 16,000 persons who now sell poisons, about what proportion of that number do you suppose would be able to pass such an examination as you propose?

I am not sufficiently acquainted with the manner in which poisons are sold in small towns to be able to answer that question.

682. Do you think that, generally speaking, the sort of person who has been in the habit of selling laudanum, and poisons of that description, in a small country town, would have any difficulty in educating himself sufficiently in the course, say of five years, to pass the sort of examination which you would require from him in order to allow him to dispense poisons?

I should think not, if he was a person of common capabilities and attainments; of common intelligence.

683. Duke of *Somerset*.] How does a person pass the examination of the Pharmaceutical Society, or of the Apothecaries Company; must he come to London in order to pass?

With regard to the Apothecaries Company, he certainly must; with regard to the Pharmaceutical Society, I am not certain, but I think not.

684. Would you have an examination which should compel every apothecary or person who sells drugs in the country to come to London to pass an examination?

I should think that might be managed otherwise.

685. You might appoint two or three places in the country where the examinations might take place?

Exactly so.

686. *Chairman*.] Assuming that no person is to be allowed to carry on the business of selling these poisons who has not passed an examination, and obtained a licence to carry on that business, to what body would you entrust the responsibility of granting or withholding that licence?

I think there are several bodies who would be adequate examiners in such a case; there is the College of Physicians, the College of Surgeons, the Apothecaries Company, the Pharmaceutical Society, and, I think, some others.

687. Would there be any jealousy, on the part of any one of those bodies if they were excluded?

I think there would.

688. Would it be possible to combine all four?

I think it might.

689. Duke of *Somerset*.] Supposing that such a law were made, and that, so you say, an intelligent person living in a country village might in the course of a few years qualify himself to pass this examination; how is an intelligent young man living in a country village to set to work to acquire this information?

In the same way that other chemists and druggists and apothecaries prepare themselves to go through an examination. I think that he must go through certain preliminary studies, which would fit him for the purpose; of course he would not be subject to so rigid an examination as would be the case if it were required for practice or for other purposes.

690. We have been already told by a witness on the part of the Pharmaceutical Society that the education costs about 100 l.?

I suppose it might be attained at a lower sum than that.

691. Looking at the limited means for attaining chemical education in this country,

W. T. Brande, Esq., country, you think that what would be required might be attained by this class
D. C. L., F. R. S. of persons?

23d June 1857.

I think it might; it depends much on the character of the person. At the Veterinary College I have seen a number of veterinary practitioners come before one who are really excellent chemists, and who undergo as good an examination for that branch of practice as if they were practising upon the human subject. In other cases I meet with men who are dull and stupid, and who never would attain that sort of knowledge that would be requisite even for this purpose; so that a great deal would depend upon the individual; but I think that a sharp, clever person keeping a shop in that miscellaneous line (as we have called it), might very easily attain a sufficient degree of information to enable him safely to sell poisons.

692. We are told that in such a town as Manchester there are not more than five or six chemists in all the town who, if you took any substance out of the whole Pharmacopœia, and asked them this simple question, "Is this prepared, or is it pure?" would be able to answer the question; do you believe that to be the state of knowledge, or rather the state of ignorance, of the chemists in such a town as Manchester?

I should not have suspected that it went to that extent.

693. Assuming that to be a correct description of the state of ignorance existing in such a town as Manchester, would that induce you to qualify your opinion as to the possibility of teaching chemistry to the persons now selling these drugs throughout all the towns and villages of this country within the space of five years?

I think that, in regard to Manchester and similar places, the sale of poisons ought to be entrusted only to proper persons, however few they might be.

694. But if, even in such a town as Manchester, there are so few chemists and druggists who are at all acquainted with the substances that they sell, what do you think must be the case throughout the country generally; must there not be a much greater amount of ignorance in the rural districts?

I should imagine so, of course.

695. Then do you think that within five years we should be able to overcome that ignorance sufficiently to find some person in each town and village who might be allowed to sell poisonous articles?

I think so.

696. *Chairman.*] Would you extend the system of examination for licences to assistants in shops who dispense these poisons?

I would extend it to all persons who should be entitled to sell poisons; if the assistant is not entitled, or has not been examined, then if a poison is asked for he must go to his master, or to whatever person is fit for the purpose.

697. *Duke of Somerset.*] In speaking of persons who should be allowed to sell poisons, would you strictly define poisons by a schedule in the Act, or would you leave it, as we understand it is left in France, without any strict definition, but imposing on the person selling it the responsibility of so selling it if it is poison?

Your Lordships are well aware of the extreme difficulty of defining a poison, and therefore I should think the suggestion your Lordship has last made would be the one probably best to be adopted. We find at Apothecaries Hall that there are several poisons which are largely used by certain manufacturers of various articles, who, being known as such, receive any quantity which they choose to take; but unless they are known to the persons who are intrusted with the sale, the sale is entirely refused even of any small quantity. There are some substances, such as corrosive sublimate, essential oil of bitter almonds, oxalic acid, tincture of cantharides, and two or three other substances, which are very largely used by manufacturers, and for bug poisons, and for preserving timber, and for making hair-washes, and perfumery of different kinds, and cleaning straw bonnets and other articles. Such persons occasionally come to Apothecaries Hall, and purchase largely; but then they are well known at that place as being respectable individuals, who may safely be trusted with those articles.

698. *Chairman.*]

698. *Chairman.*] Under the system you proposed no person would be allowed to sell poisons even to a manufacturer or tradesman, unless he received the licence which you have described?

*W. T. Brande, Esq.,
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Unless he had received the licence I have described, and were of course a person possessing other common attainments, good common sense, which would enable him to draw a line between a case where poison was probably intended for bad purposes, and where it was manifestly intended for others.

699. I presume that your opinion would be, that if the sale of poisons were restricted to persons who were able to pass this sort of examination, it would be less necessary for the safety of the public to make the regulations so stringent as would be required if poisons continue to be sold by a large class of persons who have given evidence of their competency to deal in poisons?

Yes.

700. Will you have the goodness to state what restrictions, in your opinion, would be advantageously imposed upon either class; supposing, in the first place, that licences are not required, what restrictions do you think it might be advisable to impose upon the sale of poisons, as precautions against either negligence or criminal intention?

The principal suggestions which I have heard in respect to this matter have been with regard to certain forms of bottles and coloured bottles, and so forth; that poisons would always be administered, or always exhibited, or always employed in square bottles, or in coloured bottles, or in bottles with "poison" stamped upon them; but I am not of opinion that that regulation could be enforced with any advantage.

701. *Earl of Derby.*] As far as regards the drugs kept in chemists' or druggists' shops, I presume that those regulations might be enforced without any disadvantage, so as to diminish the probability of accidents from mistake on the part of the attendants in the shop; that is to say, you might require, without inconvenience, that a chemist or druggist should keep poisonous substances in his shop in jars, or bottles of a certain colour or of a certain shape; but you would not apply that to his dispensing them to the public; is that what you mean?

That is what I mean.

702. You would not see any objection to requiring that in all chemists' shops these articles should be kept in jars or in bottles of a certain shape or certain colour, but you would not wish to extend those restrictions to the bottles in which the chemists serve them to their customers?

I do not see any objection to an apothecary or chemist keeping his poisons in bottles of a particular shape or character; but with regard to the sale of them in those bottles, I think that the result would be that the bottles would probably be used at other times for other purposes, and that that would lead very often to a dangerous reliance upon bottles not so stamped, shaped, or coloured.

703. But, within the chemist's shop, would not the fact of poisons being kept in bottles of a certain colour or a certain shape, diminish the danger of mistakes upon the part of the assistant or dispenser?

I think it would diminish the liability to accident, certainly.

704. Then, so far as the chemists and druggists are concerned, you think it would not be a vexatious restriction?

I think not.

705. Do you think it would be possible, in the ordinary business of a shop, to keep poisons separate from other drugs; or are they so numerous that that must be, to a certain extent, impossible?

I think that the more virulent and rarely-called-for poisons could, without difficulty, be kept separate; but, with regard to a number of others, there are so many preparations containing them, and so many forms under which they are exhibited, that it would be almost impossible to draw a line of distinction.

706. Would it, in your judgment, be possible in an Act of Parliament to lay down a definite rule with regard to the separation of poisons from ordinary drugs?

I think decidedly not.

W.T. Brande, Esq.,
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707. In point of fact, although some legislative restrictions may be desirable, do you think that the main reliance that the public must have must be upon the character and intelligence of the person dispensing the poison?
Most undoubtedly; that is the main point to be urged.

708. Towards that, prospectively, you think that the system of examination and licence would tend?

I think it would.

709. Do you think it would be practicable to introduce at once that principle of examination and licence, or must a certain time be given to enable a supply of properly qualified persons to arise in the country?

I am hardly aware of what happens in small towns and remote places; but, as regards the case of Manchester, or London, or Liverpool, or any other large town, I think that fit persons might be selected to sell poisons.

710. Duke of *Somerset*.] Should we not do very little if we legislated only for large towns, and left the rest of the country without any protection?

There would be some inconvenience in certain small places, but I am afraid it must be submitted to.

711. Are there not many other poisons which, upon a little reflection, might occur to you, and which in the same way must be omitted?

There are a great number of poisons, some of them of rather a virulent character, which are sold as quack medicines and patent medicines, and their composition is frequently very different from that which is specified; some of them I believe to be very dangerous poisons, but still in very small quantities, and I scarcely see how any of the measures which have been alluded to would meet the case; as long as virulent remedies are allowed to be sold as quack or patent medicines, so long that evil will exist.

712. What would be the effect of a law which would interfere with all the dealers in quack medicines suddenly in this country?

I do not think that such a law could be practically brought about.

713. Lord *Somerhill*.] You stated that at Apothecaries Hall poisons are refused to applicants of whom there is not some knowledge?

Yes, with the exception, perhaps, of small doses of laudanum. If any person came there, and asked for 20 drops of laudanum, especially in a time of cholera, or any prevalent complaint of that kind, for which its immediate administration might be important, I do not think they could refuse it.

714. Are you aware whether applications for poisons are frequently refused?

Not very frequently at Apothecaries Hall, to which my information is limited.

715. Earl of *Derby*.] Are not the dealings at Apothecaries Hall more or less of a wholesale character, and not retail upon a small scale?

They are retail also, but not upon a very small scale.

716. Lord *Somerhill*.] With respect to those refusals which you say are sometimes given in cases where suspicions may exist in the minds of the persons who have the charge of selling these articles at Apothecaries Hall, are you aware what is generally the nature of the suspicion upon which the refusal is grounded; is it a fear of intentional abuse of the poison, or a fear of accident through negligence or ignorance?

I think generally in consequence of an apprehension that they will get misapplied in some way or other.

717. Misapplied for purposes of crime, such as suicide, or possibly murder, or through negligence or ignorance?

I think both cases might occur. There are a number of persons who are in the habit of keeping laudanum by them; they take 10 or 20 drops of laudanum when their bowels get out of order, or when they are apprehensive of cholera, or disorders of that kind; and in such cases of course great mischief may follow if it is carelessly administered; as, for instance, an overdose given to a child, which is a very common case; or if any person, bent upon suicide, knows of the existence of such poison in the house: of course there would always be a liability to accidents of that kind; but that, I believe, must always be more or less the case.

718. At

718. At Apothecaries Hall when a poison or preparation is refused, is the reason for the refusal stated?

Not always. I inquired at Apothecaries Hall this morning when any case of the kind had occurred; and they told me that about a fortnight ago was the last time that they had occasion to refuse the sale of a poison; that was in the case of laudanum. I asked why they refused it; they said the woman who came in and asked for it seemed in a very irritable state, and she was not able to give any distinct answers to the questions that were put to her; she was either a little wandering in her mind, or a little tipsy, and in that case she was refused.

719. Marquess of *Salisbury*.] Have you any means of knowing what precautions are taken when poisons are sold wholesale at Apothecaries Hall?

Only that they are sold in all cases to individuals whom they know, and of course properly marked and labelled as "poison;" and in the case of arsenic, the requirements of the Act of Parliament are followed.

720. Lord *Somerhill*.] I gather that you are of opinion that there is no impediment to empowering a shopkeeper, a chemist, or other person to refuse arbitrarily to sell poison to a person that he does not know, without giving any reason?

None at all. My opinion with reference to arsenic went to such an extent, that some years ago, when I had the honour of being consulted by the Secretary of State for the Home Department, I ventured to recommend the entire prohibition of the sale of arsenic: my opinion is, that in medicine, which is the main plea for selling it, there are other remedies which are certainly as advantageous as arsenic, and much less dangerous, and that in regard to manufacturers of colours and so on, if they were forbidden the use of arsenic, they would very soon find out other substances which would answer their purpose; with regard also to washes for cattle, and the use of it for impregnating grain to prevent disease and so forth, I think that other substances might be employed as a substitute for arsenic for those purposes.

721. Earl of *Derby*.] Which would not be equally poisonous?

Which would not be equally poisonous, or which, if equally poisonous, are not of the very dangerous character that arsenic is, from its tastelessness, and the small dose in which it is poisonous.

722. Lord *Somerhill*.] Your proposed prohibition would extend not only to retail selling of arsenic, but to wholesale?

Certainly.

723. Lord *Talbot de Malahide*.] Is not arsenic a poison most easily detected? It is very easily detected.

724. Particularly yellow arsenic?

Any form of arsenic is very easily detected.

725. Is not arsenic required for stuffing birds and other animals?

It is used for that purpose; but I think there are other substances which would be equally effectual.

726. *Chairman*.] If the sale of poisons were licensed in the manner you propose, what additional restriction would you think it desirable to enact in order to secure the public from either wilful or unintentional poisoning?

I am afraid that if a person is bent upon suicide, or bent upon acquiring poison for murder, any legal restrictions that could be invented would be one way or other evaded; but with respect to the sale of poisons under the restrictions that have been suggested, I think that, in addition to those, every article of the kind ought to be distinctly labelled as "poison."

727. Do you think there would be any advantage in enacting, with respect to poisons which are not required for manufacturing purposes (where colour would not be admissible), that they should be required to be coloured, so as to prevent an unintentional poisoning?

I do not think that would be an effective preventive.

728. Do you think that that regulation is of no use now under the Arsenic Act?

*W.T. Brande, Esq.,
D.C. L., F.R. S.*

23d June 1857.

W. T. Brande, Esq.,
D. C. L., F. R. S.
23d June 1857.

My own opinion is, that it is not; but I am aware that very high authority goes the other way; I think it would be a very good plan to levy a heavy fine upon all persons who have given out poison by accident or mistake.

729. Earl of *Derby*.] Would you go so far in a case of aggravated carelessness as to withdraw altogether the licence from the person practising?

I think so, if it occurred more than once, especially after a heavy fine.

730. Would not the deprivation of a licence to sell poisons have the practical effect of preventing him from acting as a druggist at all?

I should think so.

731. Then the withdrawal of the licence would be the withdrawal of the whole means of livelihood that the person had?

I think it probably would.

732. Of course you would think that that penalty must be reserved for very extreme cases?

Yes.

733. You would not apply it even in the case of a second offence for such a thing as misputting a label upon a bottle, or any trifling infringement of the Act?

I think not; but I think in aggravated cases it would be a very just punishment.

734. *Chairman*.] Does anything else occur to you which you think it may be useful to state for the information of the Committee?

I think not. There are some preparations in the Pharmacopœia which give rise to a good deal of difficulty; one is * * * which is a virulent poison to children, and it is a medicine very frequently administered, and it is not unfrequently fatal.

735. Lord *Talbot de Malahide*.] Is ergot of rye a necessary article of medicine?

I think it is.

736. And savin?

And savin.

The Witness is directed to withdraw.

S. J. Burch, Esq.
M. R. C. S. E.

SAMUEL JESSUP BURCH, Esquire, M. R. C. S. E., is called in, and examined as follows:

737. *Chairman*.] WILL you have the goodness to state what position you hold in the London Hospital?

I have held the appointment of Resident Medical Officer at the London Hospital for nearly 12 years: prior to that, I was House Surgeon to the Lincoln County Hospital; and before that, I was House Surgeon to the County Hospital at Carlisle, in Cumberland.

738. Have you turned your attention to the subject of poisons?

I have, since I have been in the London Hospital, with reference to a number of cases of poisoning that we have had. I have here an abstract, which I will lay before your Lordships, of the cases which we have had during the last 11 years: it refers to the points to which you are now directing your attention: it is a copy of an abstract which has lately been forwarded to the Secretary of State.

The same is delivered in, and is as follows:

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739. It appears that during the 11 years, from 1846 to 1856, inclusive, you had 228 cases of poisoning, of which only 15 have died?

Yes.

740. Do you consider that to be an extraordinary instance of successful treatment, or what is the sort of proportion that you think the deaths generally bear to the cases of poisoning?

I think it depends very much upon their being taken in hand within a very short period of the administration of the poison; if that is done, there is a much greater probability of success; that is the cause, I believe, of the slight mortality we have had at the London Hospital, that immediately they are brought in, I have generally been on the spot to attend to them, and I have seen invariably most of those cases.

741. Have criminal proceedings been taken in consequence of any of those cases?

In 1850 or 1851, a few months prior to the passing of the Arsenic Act, in consequence of the great number of cases that we had had, both as in-patients and out-patients (the abstracts which I have delivered in refers only to in-patients), when Sir Edward Buxton was chairman of the House Committee, I wished to bring the matter before the public. At that time, the question was brought before Mr. Hammill, the magistrate, as a number of cases were occurring in Essex and other counties, with reference to women poisoning their husbands, and also their children, by means of arsenic, for the purpose of getting the fees of the burial associations.

742. I see that a great number of these cases arose from laudanum?

The greatest number from laudanum. The next largest number is from oxalic acid.

743. Lord *Talbot de Malahide*.] Were they mostly accidental or malicious? Mostly suicidal.

744. Duke of *Somerset*.] Do you think that the Arsenic Act has been successful?

I believe it has been very successful in general; of course there are isolated cases in which arsenic has been unfortunately fatal, especially in one case to which I will refer presently.

745. Earl of *Derby*.] To what do you attribute the very small proportion of cases of arsenic during the period, there being but eight cases of arsenic out of the whole 288; whereas there are of laudanum 65, of oxalic acid 38, and of sugar of lead 33?

The reason I believe is this, that a druggist does not find it profitable to keep arsenic by him, because in the eastern districts of the metropolis he is not called upon to sell arsenic so frequently as he is in the country districts, where it is wanted for agricultural purposes.

746. I understood you to say, that before you came to the London Hospital you had some experience in country practice?

Yes, at the Lincoln County Hospital.

747. Can you give the Committee information as to the mode of dealing with poisons in country districts, in the way of restrictions and precautions, as compared with the mode in London and other large towns?

With regard to the Lincoln County Hospital, I refer especially to laudanum, in the first instance; in some parts of the county of Lincoln, which were not well drained, there was a very large demand for laudanum. A chemist, whose name I believe to be Roots, used to derive a very profitable remuneration from the sale of laudanum, which arose from the use of it in districts where the terrible malária of agüism is engendered. But with regard to arsenic, I should say they are very cautious; it is only used by large farmers: but as to what is done in Essex, I am ignorant, except from the reports of the assizes.

748. Would you consider that different regulations ought to be applied to the great towns and to the country districts?

I think there should be, for reasons which I can state.

749. What

749. What restrictions would you desire to impose upon the sale of poisons in large towns?

In large towns, persons, as a general rule, are much more dissipated than they are in small villages and hamlets. I speak from my own observation and experience, particularly in that part of London where I have been living the last eleven years, the neighbourhood of St. George's in the East and the Thames; in fact, a district of London which we might call almost the Liverpool of the metropolis, containing a large maritime population. I assure you that Mr. Yardley and Mr. Hammill will bear me out in my statement, as they kindly permitted me to use their names in corroboration of points I propose eventually to bring before the public. The dissipation is now attaining such a height in that part of the metropolis, that it is fearful to contemplate.

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750. In what way does the question of dissipation affect the sale of poisons?

In this way, that people breaking out into habits of dissipation, often seek recourse to suicide, or to poison, to relieve that terrible state of mind which intoxication or dissipation in any form inevitably produces. I can confidently appeal to Mr. Yardley, the Thames magistrate, and Mr. Hammill, of Worship-street, as to the character of crime in that district.

751. Will you state the precautions which you would recommend for the purpose of discouraging suicide by poisoning?

I would diminish the facility of obtaining poisons.

752. What would be the restrictions which you would desire to impose upon the sale of poisons?

I will just premise with reference to the qualifications of the persons who are now in the habit of selling poisons, that I can refer to two special instances which were brought to my knowledge when I was making inquiries some days since, of two men who were connected with one of the large metropolitan hospitals, a sort of labourers in the laboratory of the hospital, and who went into practice as chemists and druggists, and one of them now is in practice as a surgeon, and has over the door his name, "Surgeon;" and I believe, that if you could minutely investigate the matter, you would find that not by tens or hundreds, but I will almost venture to say by thousands, throughout all the districts of London, and the provinces of the empire generally, the persons who are now selling poisons are most inferior in education, and most unqualified to dispense medicine, and certainly to sell poisons.

753. Duke of Somerset.] This arsenic appears not to be coloured as the Act requires?

No, not at all.

754. Do you believe it to be common that arsenic, although prohibited to be sold, except with colouring matter mixed with it, is frequently sold in that state?

I could not say that, from my own experience, but I would almost infer that it must be so.

755. Earl of Derby.] What restrictions would you propose to impose for the purpose of checking the promiscuous sale of poisons?

I think there ought to be a general restriction as to the more important class of poisons, like salts of morphia, aconite, strychnia (arsenic has already been provided for), and atropine, the active principle of deadly nightshade.

756. What is the nature of the restrictions which you would recommend; would you seek for those restrictions in the qualifications of the dealers, or in imposing certain regulations upon all persons who deal in poisons?

I should view it in both lights; I should provide undoubtedly for a preliminary education for a man who is about to enter upon the business of a chemist and druggist to dispense medicines and to sell poisons; and then I would provide also with regard to the more important poisons, like strychnia, aconitum, salts of morphia, &c., that he should not sell those without a witness.

757. You would make it penal to sell any drug or poison without the person having a licence consequent upon an examination?

Yes; I think that a careful examination as to his knowledge of the action of

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drugs, and his mode of dispensing those drugs, would indirectly check to a great extent the way in which medicines at the present time are sold in London, adulterated to a most fearful extent; it would apply many ways.

758. Would you apply that principle to country districts, as well as to London?

To a certain extent I should; but you could not be so stringent in the country as in London. In villages in the country drugs are often sold by females; but they should only be allowed to sell certain things, and to a certain extent.

759. Do you think that in an Act of Parliament you could have provisions which should be more strict in a town than in a country village?

I think so; because in a country village a person is generally known, or is supposed to be known, to everybody; but in places like Liverpool and Manchester, and in certain districts of London, you cannot prevent the evil unless you check the indiscriminate sale of poisons.

760. Then I understand that you would provide a schedule of certain poisons, the sale of which you would entirely prohibit by unqualified persons?

Yes.

761. Have you considered what poisons that schedule should include?

I have not considered that; I only received your Lordships' summons on Saturday evening, and on Monday I was laid up with diarrhœa and vomiting, in consequence of handling this paper of arsenic without sufficient care, in consequence of the very careless way in which it had been wrapped up; and I may observe there is no name upon it of the party selling it, but merely "arsenic, poison."

762. Lord *Talbot de Malahide*.] How did the arsenic come into your possession?

It was brought to me by the medical man who found it in the room when the man was dying.

763. Duke of *Somerset*.] It was given to the man as a remedy?

As a remedy for delirium tremens, as I was told. The facts will all come out to-morrow before the coroner.

764. Lord *Somerhill*.] The chemist gave it to the patient, trusting to his intelligence to take a proper dose?

He could not possibly have taken a proper dose; one-fourth of a grain of it would produce violent colic; and in some cases two grains of it will produce death, especially if the man's constitution is broken down by previous intemperance, especially when taken upon an empty stomach.

765. Lord *Talbot de Malahide*.] Is arsenic often taken in cases of delirium tremens?

I never heard of it.

766. Lord *Somerhill*.] I understand that you would have a different provision with respect to persons selling chemical drugs in villages or towns with a small population, from what you would have with respect to persons who sell chemical drugs in large towns?

In large towns, containing a certain population, a man who sells drugs and dispenses medicines ought to have such a previous training and to undergo such a preliminary examination as will ensure his knowledge of the subject. If a man has had a good previous training in a business like that of a druggist, you might fairly infer that he would certainly have discretion sufficient to say to a person that came saying, "I want a penn'orth of arsenic," or "a penn'orth of laudanum," "I will not give it," if he saw that the man was not sufficiently respectable to be trusted with it.

767. You mention that you have known instances of persons wholly unqualified assuming to themselves the name of "surgeons"; is not that contrary to the law?

There is a law that was passed in the year 1815, the Apothecaries Law; that law, although not positively obsolete, is, owing to the expensive mode of proceeding which it requires, perfectly in abeyance, and of no use whatever.

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The College of Surgeons has no law whatever prohibiting unqualified practitioners, nor has the College of Physicians; the only body corporate in England which has such a law is the Apothecaries Company; but they cannot afford to prosecute men who violate it.

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768. Lord *Talbot de Malahide*.] But the Apothecaries Company have no power of prosecuting a druggist?

Not a druggist.

769. Have not the censors of the College of Physicians, with the wardens of the Apothecaries Company, a joint power of examining druggists' shops?

I think not; I never remember an instance of it carried out in practice.

770. Lord *Somerhill*.] Have you reason to believe that the persons to whom you have alluded actually venture to perform operations?

I believe they do, for this simple reason, that one frequently sees over the doors of such persons, "Bleeding and Cupping done," and "Tooth-drawing," and such like minor operations.—Before retiring, will your Lordships allow me to suggest that, should anything be done to provide for persons carrying on a druggist's business possessing due qualifications, I think it is very important that there should be some proper body which should have the power of entering any druggist's shop to examine the quality of the drugs, because some shops which sell laudanum will sell it 25 per cent. below the mark; others will be at the correct point, and that is very important in certain cases.

771. Marquess of *Salisbury*.] Could you apply that examination to quack medicines?

It would be a difficult thing to do so, on account of the laws of organic chemistry not sufficiently embracing those points which refer especially to some vegetable poisons.

The Witness withdrew.

Ordered, That this Committee be adjourned to Tuesday next,
Two o'clock.

Die Martis, 30^o Junii 1857.

L O R D S P R E S E N T :

LORD PRESIDENT.

Duke of SOMERSET.

Marquess of SALISBURY.

Earl of DERBY.

Lord SOMERHILL.

Lord ROSSIE.

THE LORD PRESIDENT in the Chair.

ALFRED SWAINE TAYLOR, Esquire, M.D., F.R.S., is called in, and examined as follows :

Evidence on the
Sale of Poisons, &c.
Bill.

*A. S. Taylor, Esq.,
M.D., F.R.S.*

30th June 1857.

772. *Chairman.*] WILL you state what situations you hold?

I am Professor of Chemistry and Medical Jurisprudence in Guy's Hospital.

773. For how long have you turned your attention particularly to the question of poisons?

Especially since the year 1831 ; 26 years.

774. What opportunity have you had of studying these questions?

I have devoted myself almost exclusively to that branch of medical science, and have seen most of the cases that have been brought as the result of accident to Guy's Hospital, and I have also had a large number of cases referred to me from all parts of the country by medical practitioners.

775. Have you ever been engaged to assist in criminal proceedings?

Frequently.

776. Have you, in point of fact, been engaged in all the principal poisoning cases?

Yes, for the last 10 or 12 years.

777. Will you state whether you consider that any change is required as to the present system of obtaining poison?

I think that a change would be desirable; I think that the facilities for obtaining poison are at present too great.

778. Can you give any instances to show in what way those facilities have been injurious?

I think that is shown in a great measure by the increase of deaths from poison. In publishing a book on poisons in 1847-48, I collected a number of tables of statistics regarding poisoning, and there had been a Return made to the House of Commons, under the Motion of the late Sir Robert Inglis, of the deaths from poison in England and Wales in the years 1837 and 1838, from all the coroners in this country. That gave us at once, and I believe for the first time in England, a knowledge of the number of deaths that took place from poison; that is to say, the deaths that were ascertained to be from poison.

779. Duke of *Somerset.*] All those cases were the verdicts of juries?

Yes, all those were coroners' cases; in compiling that table for publication, I found that there were 527 fatal cases of poisoning in 1837 and 1838, in which the poisons were known; but there were 14 cases in which the poisons were unknown, making altogether 541 deaths from poisoning. That would be about 270 cases per annum on the average. In 1840, I went through the whole of the tables of the Registrar-general as to the number of cases of poisoning,

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poisoning, and I found that in that year (that is, only two years removed from the coroners' return), the deaths amounted to 349. Since the registration of deaths we have come to a better knowledge of them, for many were buried before without any proper certificate. Then there are some statistics which have been lately published, which I believe are accurate, by Mr. Wilson of Birmingham. I have gone over the tables, and it appears that the average, from the last registration returns for six years, amounted to 536 deaths per annum from poison. The years are these, from 1848 to 1853. The total deaths from poison in the Registrar-general's Report, in six years, are given at 3,218, making an average of about 536, or something like that; so that they have gone on from about 270 to 349, and to 530, progressively increasing.

780. In the first case, which you took from the coroners' returns, you had no register, and you say that the register has led to greater accuracy?

Yes: I think that very likely many escaped observation in the early period.

781. Therefore the increase can hardly be taken as a fair criterion?

No: I think that a fair allowance might be made for that circumstance.

782. Lord *Rossie*.] You would compare it with the year 1840?

Yes; that would be fairer, I think, although every year there are more accurate returns with regard to deaths. Those are all the returns we have, I think, respecting the general statistics of poisoning in this country.

783. Is there any means of knowing what proportion of the cases are supposed to be accidental, and what proportion are supposed to have resulted from the felonious administration of poison?

There is no accurate return of that. In the case of the Registrar-general's Report for 1840, there were 181 males, and 168 females; the cases of suicide from poison were 161.

784. Duke of *Somerset*.] Is that in one year?

Yes, that is the year 1840; the cases of accident or homicide were 188.

785. Marquess of *Salisbury*.] Are there any cases of intentional poisoning besides the cases of suicide?

No; the accidental cases are not separated from the homicidal cases.

786. Lord *Rossie*.] Is there any means of ascertaining whether any particular kind of poison was used in the majority of those cases?

Yes: we have, especially in the coroners' returns, very important information upon that point.

787. Have you the means of getting it from the coroners' returns in late years?

No; there has been no return since that which was made upon the order of Sir Robert Inglis, which is now 20 years ago. I can form a kind of judgment by a comparison of the number of cases that come before me; but it appeared that, in the two years 1837 and 1838, the poisons chiefly used were—opium, 196 cases, and—arsenic, 185 cases.

788. Is that since the Arsenic Act?

No, before the Arsenic Act.

789. Have you any return since the Arsenic Act?

No, there has been no return since the Arsenic Act. I have the statistics of Guy's Hospital for the last few years. From the return of 1837-8, it appears that the mortality occasioned by taking opium was 37 per cent., and by arsenic 35 per cent., making 72 per cent. for these two poisons; so that very nearly three-fourths of all the deaths were caused by opium and arsenic; by sulphuric acid, or oil of vitriol, 6 per cent.; prussic acid, 5 per cent.; oxalic acid, 3½ per cent.; corrosive sublimate, and mercurial preparations, 3 per cent.; and the rest were made up of other poisons, such as tartar emetic, nux vomica and others, varying from 1 to 1½ per cent.; but I have given the principal, making 89½ per cent. altogether—opium, arsenic, sulphuric acid, prussic acid, oxalic acid, corrosive sublimate, and mercurial preparations.

790. Duke of *Somerset*.] The three greatest per-centages are opium, arsenic and prussic acid?

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The two most important are opium and arsenic ; prussic acid forms about five per cent. of the deaths.

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791. Marquess of *Salisbury*.] Is there any mortality resulting from other poisons besides those ; strychnine, for instance ?

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Strychnine has only been generally known as a poison within the last two or three years, and chloroform also ; so that the return throws no light upon those. I have taken a note of the proportion of cases of poisoning by opium ; I have already given that for 1837 and 1838. I will now give the Registrar-general's returns in 1840. He only gives, out of 349 cases of death, 75 as caused by opium and 32 by arsenic ; so that in the large proportion of deaths from poisoning in 1840, we have no information of what the poison was. Very often the verdict is, " Died from poisoning," without any analysis. The mortality from opium in that case was 21 per cent. Then, in the Birmingham Hospital, out of 63 cases, there were 12 cases of poisoning by opium. They did not, the whole of them, prove fatal, but the cases of poisoning by opium formed 20 per cent. of the cases admitted into the Birmingham Hospital, in a period of eight years. In Guy's Hospital, during the last three years, we have had 27 cases of poisoning ; not such cases as are referred to me for criminal investigation, but cases of patients coming into the hospital ; five of these cases were from laudanum, amounting to about 20 per cent., or one-fifth of the cases, but not one of those was fatal ; they were actively treated, and they recovered. Arsenic (and this is one point to which I beg to call particular attention) certainly appears to have become less frequent as a poison, for in the last three years there were only two cases brought to Guy's Hospital. Now, generally speaking, there were two or three cases a year in former times before the Arsenic Act came into force ; so that poisoning by arsenic seems to have become less frequent since the Arsenic Act was passed.

792. Lord *Rossie*.] It is only in cases where there is a chance of recovery that the persons are brought into the hospital ?

Yes ; but they are brought in sometimes 8 or 10 hours after the poison has been taken ; if the persons are in a dying state, they are not brought to the hospital. Then, in the last three years, the number of cases of poisoning by oil of vitriol was three ; nitric acid, one ; oxalic acid, four ; laudanum, five ; prussic acid, one ; oil of bitter almonds, one ; solution of ammonia, one ; and brandy is also put down as a cause in one case ; that was a large quantity that a man swallowed, and from which he died in a short time ; Burnett's fluid, one ; poisonous berries, two ; locust beans, one ; mercurial preparations, two. Those are all that are recorded, so that we have really no very accurate returns to show that there is an increase of poisoning ; it is more a suspicion than a proof in any way.

793. *Chairman*.] Do your observations tend more towards the evil of the facility of procuring poison for criminal purposes, or have they regard to the ease with which mistakes are now made in swallowing poisons ?

I should make this observation, that I think there is too great facility for procuring poison for criminal purposes, even now, although the Arsenic Act has done some good in that respect ; I think it has reduced the number of deaths.

794. Lord *Rossie*.] Do you say that the actual number of deaths has been reduced, or only the number of deaths by arsenic ?

The deaths by arsenic chiefly have been reduced. I was lately at a small town in Buckinghamshire where I had an opportunity of examining the arsenic-book ; and I thought that it might be of use to your Lordships to know, not only how many sales of poison there are in a country town, but also other facts connected with these sales. A man was charged with having poisoned his wife, and this led necessarily to the production of the arsenic-book, and while the book was before me, I made these observations. The population of the place is about 6,000. The arsenic-book was ruled in columns, representing first, the day of the sale ; secondly, the Christian and surname of the purchaser ; thirdly, the place of abode, parish and street ; fourthly, the condition or occupation ; fifthly, the quantity of arsenic sold ; and sixthly, the purpose for which it was required. In the case of some purchases the signature of the purchaser only had been given ; there was no witness, although this is contrary to the Act.

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The purchases were made in the two years 1855 and 1856; and there were 36 purchases of arsenic at this druggist's in the small town to which I refer. In the purchases 33 ounces were sold: the general quantity sold was from half an ounce to an ounce. The smallest quantity sold was a quarter of an ounce, and the largest a quarter of a pound. The object was chiefly to poison rats and mice: that was the purpose stated in the book. There was one instance of a sale of two pounds, for the purpose of killing the fly in sheep. What I particularly observed in the book was that, generally speaking, the persons who bought the arsenic had not the ability of writing; they made a cross, and no witness, in many cases, was required by the seller. Then, with regard to colouring the arsenic, that was a curious point in the legal case to which I have referred; for I found the arsenic in the dead person's stomach without colour, and the books showed that the woman had bought it coloured; it was entered "coloured with indigo." Then there was a little difficulty about whether it could have been the same arsenic, or some other that her husband might have procured and given to her with the intention of destroying her; it was clear that her signature was attached to the purchase. The legal question was, whether from the time she lived, and under the influence of vomiting, the amount of colour would not be so small that it would escape observation; and I made answer that I thought it might be so, with that small quantity; consequently, that settled the point so far. But your Lordships see from this statement the operation of the Arsenic Act in a small town.

795. *Chairman.*] What do you consider to be the result?

That arsenic was obtained rather easily, and especially without witnesses; but there is still an amount of restriction upon the sale of arsenic that renders it a little difficult, so that we may consider that some good has been done by that Act.

796. *Duke of Somerset.*] Do you know many cases in which the penalty has been enforced?

I have never known one.

797. Do you believe that the Act is generally observed, or is it not very much neglected?

There is no doubt that it is much violated; there have been several criminal cases where the arsenic has been clearly purchased white, uncoloured; and I think that one great reason for that is, that the Act does not order that it shall be kept coloured, but merely suggests that colouring shall be put to it at the time of delivery when sold; this creates an amount of trouble which persons will not often take; the vendor and purchaser therefore conceal the matter, and it is not known.

798. Whose interest is it to bring an action against a person doing it?

I do not think that there is any appointment made with regard to that.

799. If the Act is to be enforced for a purpose of that kind, do you not think that it is very important to see that the Act is afterwards carried into effect?

I feel sure that that is necessary, not only with regard to arsenic, but with regard to other poisons also.

800. The mere putting a penalty into the Act, unless there is some inducement to persons to enforce the Act, is apt to be a very nugatory measure?

I think so. It is astonishing what facility there is occasionally for procuring poison. I had to examine one case which occurred in the county of Essex, where a woman had about 37 noxious substances in her possession, some of them rather active poisons.

801. Who was that woman?

A Mrs. Chesham.

802. Did she keep a shop of any kind?

No, nothing of the sort; she seems to have acted as a regular poisoner; the coroners of Essex told me that they were almost afraid to look back to the extent to which, it was suspected, she had been guilty. I gave evidence myself in four cases where she was tried for murder, and she escaped in three. She was able to obtain arsenic uncoloured, and to use it in any way that she pleased; and there

was

was no possibility, from the total absence of registration, of tracing when or where, or how she got it. And in the present day, as your Grace has suggested, I think the Arsenic Act presents a great difficulty, by reason of the omission to appoint a prosecutor. I know of no person who can undertake a prosecution if the Act is evaded.

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803. Lord *Rossie*.] What object had this woman in poisoning those persons whom she did poison?

I think her object was partly plunder; the possession of property; but with regard to her own husband and sons, it was difficult to know whether it was poverty that induced her to get rid of them or not.

804. She made use of different kinds of poisons?

In the cases which I had to examine they were all arsenic; but she had in her possession, when the house was searched by the police, a great number of other substances, compounds of mercury and corrosive sublimate and other bodies, which she may have used without my knowledge.

805. Duke of *Somerset*.] Do you think that in this country, with the great facilities which there must be of obtaining poisons under any system, where they are obtained with malicious intent, any Act would prevent such a woman as that if she were a clever woman, as you say she was, getting poisons for such purposes?

Probably not. I do not think that any Act would altogether prevent the crime of poisoning.

806. *Chairman*.] You think that an Act might be framed which would make the detection of the crime of poisoning more easy?

Yes; in the very cases in which that woman's sons were poisoned the greatest difficulty was experienced in endeavouring to trace out where she procured the poisons, and many of the shops in the towns of Essex were searched, but in no case could they find out the least trace. That, I think, is a most objectionable state of things: I think we should make it more difficult for any one to get poison.

807. Duke of *Somerset*.] You have given an instance of poisoning by arsenic in which you yourself were concerned, and in which you said that it was very difficult to detect the colour: if you put provisions in the Act with regard to poison, a person who is ingenious enough to obtain it in spite of those provisions has double the advantage in using the poison, because, first, people will look to see whether they can detect him by means of those provisions, and when they find the provisions of the Act fail in that, the next thing is to suppose that he has not obtained the poison?

I do not think that the colouring would so much influence the question of homicidal poisoning as of accidental poisoning; I have known many cases of white arsenic being put into a teapot or a plum-cake instead of carbonate of soda: I do not think that with regard to murder the colouring would do much. At this very moment, the trial which is going on at Edinburgh involves the question of the colouring of the arsenic. If an accused person can be proved to have purchased a large quantity of coloured arsenic, and a very much larger quantity, say 150 grains, of white arsenic should be found in the stomach, that would go a long way to show that it was a different kind of arsenic. In the case of the woman referred to not more than two or three grains were found in the stomach; in this case the colour would hardly be perceptible, but in 80 or 100 grains it might be perceptible.

808. Marquess of *Salisbury*.] Can the colour be taken out of the arsenic by any easy process?

Not by any easy process; a skilled chemist can do it, but I do not think that it is possible for those who purchase poisons at shops to do it.

809. Duke of *Somerset*.] The Committee have been informed that washing in a saucer would do it?

I think that that is quite a mistake. From experiments which I have made I do not think that the colour, indigo, would be easily removed by such persons as would go to shops to buy poisons.

810. It has been suggested that it would be desirable to mix some other substance with arsenic more approaching to the specific gravity of the arsenic itself,

A. S. Taylor, Esq., itself, which would make it more difficult to obliterate the colour. What is
M.D., F.R.S. your opinion upon that subject?

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I do not think that the specific gravity would very much affect the matter.

811. You do not think that important?

No; I think that the indigo colour is better than the soot.

812. Marquess of *Salisbury*.] Arsenic is a good deal used in certain manufactures, is it not?

Yes, it is.

813. Would it be applicable to those manufactures in a coloured state?
 To some of them it would not.

814. Then you must of necessity allow the sale of white arsenic?
 Yes, for the purpose of certain manufactures.

815. What sort of manufactures are they?

It is used in the manufacture of glass, especially opal glass; opal shades are made with arsenic; it is used in the manufacture of shot; it is used also in the steeping of grain, and in killing the fly in sheep. It is likewise largely used in another very curious branch of manufacture; I believe the largest quantity of arsenic used in this country is used in the manufacture of papers for covering walls. I have here a specimen of the paper to which I refer (*producing the same*).

816. *Chairman*.] Do you consider that harmless?

No, it is very injurious.

817. Lord *Rossie*.] Is it injurious to the people who are employed in the manufacture?

Yes; it gives them inflammation of the nose and eyes; many of the workmen I am informed will not even hang the paper.

818. Are there young persons employed in the manufacture?

Yes. There was an instance published in a medical work in reference to some cases of illness which occurred to persons who were living in a room which was papered with this paper, and it was described to me that the persons had suffered as from the effects of arsenic.

819. *Chairman*.] Do you consider that this paper can have any deleterious effect upon the persons residing in a room papered with it?

I have no doubt of it, from cases which have been communicated to me; one from Somersetshire, and another from Birmingham. The colour is put on very loosely indeed; it contains nearly 50 per cent. of the poison, and I believe that there are many cases of illness occurring to persons living in rooms papered with this kind of paper.

820. Lord *Rossie*.] Is it more used in the case of cheap papers or dear papers?

In both; it is a permanent green, and that is the reason why it is selected.

821. Is it more used in the light or the dark?

It is found in both, but the arsenic is chiefly in the light green.

822. *Chairman*.] In what way does it affect the health?

In the cases which were actually referred to me it produced constriction of the throat, nausea, loss of appetite, tingling and numbness in the extremities, and severe headache.

823. What contact was there between the individual and the poison?

No other than might arise from the ordinary dust collecting in the room. I was informed that the gentleman and his wife sat in this room for a length of time during the day, and burnt gas in it at night, and they could not account for their illness. Dr. Hinds of Manchester, who sent the paper through a friend, advised the gentleman to go to the sea-side; he went, and recovered his health, and when he came home again he was again taken ill, and that led, from the symptoms being like those resulting from arsenic, to Dr. Hinds tearing off a portion of the paper and sending it for examination.

824. Are

824. Are you aware that in any country papers of this description are not permitted by law? *A. S. Taylor, Esq.,
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Yes, it is the case in Prussia that green copper colours, containing arsenic, are subject to control, and are not allowed to be sold as water or oil colours for painting in-door work, or printing paper-hangings. If found on the premises of dealers in the latter articles, they are confiscated, and the owner punished with fine or imprisonment.

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825. What is this which you have handed in?

This is a portion of copper which has been employed for testing one of these papers, and it is coated with metallic arsenic obtained from the paper. That shows the difference between the copper without the arsenic, and the copper with the arsenic. This paper is referred to in a note, which, with the permission of your Lordships, I will read. It was after the publication of the Birmingham case in a Medical Journal that I received this letter from a gentleman, who was a stranger to me, but who is evidently a professional man:—"Petersfield, May 29th, 1857. My dear Sir; I venture to take the liberty of forwarding some green flock paper," (that is this very paper) "and shall be particularly obliged if you would inform me if there is any arsenite of copper in the green flock of it. A friend, and patient of mine, who spends a considerable part of the day in a room lately hung with it, has been suffering for some time past from irritation of the throat and chest, and I should at once order the paper to be removed should there be anything injurious about it." I examined the paper, and found arsenic in it.

826. What is that envelope which you have handed in?

I have analysed it; it was sent to my house, and being engaged in the examination of the paper at the time, I cut off a slip of it, and found in the green tint inside the envelope the arsenite of copper.

827. Duke of Somerset.] Do the remarks which you have made with regard to the danger of this paper apply to any other colour except green?

There is an orange yellow which contains arsenic, but it is not very often seen; green is the most common: there is the colour orpiment, a golden yellow colour that is sometimes used; but it is not by any means so common as the green. I have asked in several shops where this paper is sold why they had it, whether they did not know the danger of it, and they said, yes, but it never faded, and that it was found to show off optical instruments and other instruments better than any other colour. I had on one occasion a loaf of bread served on my table at breakfast, and the bottom crust of it contained this arsenite of copper; and I afterwards traced it to the baker's shop, where I found that he had had his shelves papered and the shop re-decorated, and there I found something like 150 loaves placed upon the shelves in contact with this arsenite of copper. I think it is really a most dangerous substance to be allowed to be used in the free way in which it is.

828. Marquess of Salisbury.] Is it used in water-colours?

Yes.

829. Chairman.] Can you suggest any legislative enactment that would prevent its being used?

It is just a question whether the terms of this Act do not, to a certain extent, do so; arsenic and its compounds are placed in the schedule. It might be a question whether it should not be compulsory, as in Prussia and in other countries, to use some other green, because there are other greens which can safely be used.

830. Earl of Derby.] I think you said that this is the most permanent green that you know of?

It is considered so; it does not fade or tarnish in the way that other greens do.

831. Marquess of Salisbury.] Does the colouring of arsenic alter the taste of it?

No, the colouring gives no taste to it. This (*producing a bottle*) is a substance called carbazotic acid.

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832. *Chairman.*] Do you think that there would be an advantage in using this substance, instead of the indigo or soot which is proposed in the Bill?

No.

833. Why do you think so?

It is of a yellow colour, and by candle and gas light it is hardly visible; it is obtained from gas-tar in large quantities now, and is remarkable for giving a beautiful yellow dye to silk; this would be immediately washed out of the arsenic. This (*producing another bottle*) is the carbazotic acid mixed with arsenic, and this is in solution with water (*producing another bottle*). I would say, that I object to the carbazotic acid, because I think it would be so easily removed by washing, and it would not be seen by candle-light; indigo would be seen by all lights.

834. Marquess of *Salisbury.*] You have mentioned the use of arsenic for steeping wheat; would any colouring affect the use of it for that purpose?

No, it would not.

835. It would be equally advantageous for that purpose?

It would be equally advantageous.

836. With regard to sheep-wash, how would it be?

The colouring would not at all affect that; but the carbazotic acid, I ought to state, is a poison of itself, and I do not think that it would be quite safe to use one poison to colour another poison.

837. Earl of *Derby.*] Particularly in the hands of ignorant and inexperienced people?

Yes; where they are left to use it *ad libitum*.

838. Lord *Rossie.*] Are you aware that arsenic is used for colouring wooden penholders?

I am not aware that it is; but it might be used for such a purpose.

839. Have you never had children brought to the hospital with symptoms of poisoning from arsenic, who had been employed in the manufacture of wooden penholders?

No, never.

840. *Chairman.*] Does any other fact strike you as worthy to be mentioned to the Committee, proving the necessity of some legislation in this matter?

I think that legislation would have the effect, not certainly of doing away with poisoning in any form, but of considerably reducing the number of accidents from poison, and also rendering it more easy to trace out crime where poison has been obtained for criminal purposes. We could never prevent poison being used for suicidal purposes.

841. Duke of *Somerset.*] You have been for so many years brought into connexion with poisoning cases that your mind is familiar with the subject; have you considered the law in France, or in other foreign countries?

Yes, I have.

842. In France, we are told, there is a very strict law to prevent the sale of poisons?

Yes, there is.

843. But at the same time there is no definition of poisons?

No; but they give a list of the different substances which are not allowed to be used, except under certain restrictions. I can place before your Lordships a copy of that list; it was very much increased during the time of Louis Philippe, but it has since been diminished by the present Emperor, when President of the Republic; and in France the law now is, with regard to a certain list of substances, dated the 8th of July 1850. This is a French book, which I thought your Lordships would like to see with reference to the sale of poisons in France. It contains the whole of the French Regulations.

844. Earl of *Derby.*] Those are the scheduled substances?

Yes. The number of substances in the French schedule, according to the law of the 8th of July 1850, amount to 19. They are prussic acid; the vegetable alkaloids and salts; arsenic and its preparations; belladonna, extract and tincture; cantharides

cantharides or Spanish flies; chloroform; hemlock, extract and tincture; cyanide of mercury; cyanide of potassium; digitalis, extract and tincture; tartarized antimony; nicotianine (the volatile oil of tobacco); nitrate of mercury; opium and its extract; phosphorus; ergot of rye; stramonium, extract and tincture; and corrosive sublimate.

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845. *Chairman.*] Can you state what the difference is between that enumeration and the enumeration which is contained in Schedule A. of this Bill?

Yes. There are some poisons which do not appear to be much used in France. Poisoning by oxalic acid is very rare in France. There are about 23 articles in the schedule of the Bill. Perhaps the articles might be reduced in number. I have taken a list of 13 that I thought might comprise all that would be necessary. I have here a list, which shows at once what articles are common to the English and the French lists, and in what respect they differ. We have, both in the English and the French lists, arsenic and its compounds; corrosive sublimate and its compounds; the poisonous vegetable alkaloids; prussic acid; the cyanides of mercury, potassium, and silver; cantharides and its preparations; belladonna and its preparations; hemlock; opium in tincture, extract and powder; foxglove and its preparations; stramonium and its preparations; chloroform and its compounds; and tartarized antimony. Then we come to those which are peculiar to the English list. They are, oxalic acid; binoxalate of potash; nux-vomica, seeds and bark; cocculus indicus; savin; lobelia; chlorides of zinc and antimony; essential oil of bitter almonds, and any mixture containing it; and aconite. Then we come to those articles which are peculiar to the French list. They are, phosphorus; henbane, extract and tincture; nicotianine (the volatile oil of tobacco), and nitrate of mercury.

846. Will you state what are the 10 substances that you would expunge from Schedule A.?

I have drawn up this list of 13 substances: arsenic; corrosive sublimate; the alkaloidal poisons; prussic acid; cyanide of potassium; the essential oil of bitter almonds; opium, including laudanum; chloroform; oxalic acid; salt of sorrel; nux-vomica; and tincture of aconite. Those are all the substances that I should recommend to be included in the list, and that makes the number of 13, taking laudanum and opium as separate articles.

847. *Marquess of Salisbury.*] Do you know of any poison of which no trace exists after it has been taken?

Yes; there are several that would destroy life without leaving any trace of any kind in the dead body.

848. *Duke of Somerset.*] Those articles which you have read which are enumerated by the French law, are obliged to be kept under lock and key?

Yes, and the key to be kept in the possession of the chief pharmacist of the shop.

849. Are not those substances wanted frequently to mix with others?

Yes, some of them are; for instance, foxglove, hemlock, tartarized antimony, and opium.

850. It has been stated to the Committee that great inconvenience and danger would arise from a regulation of that kind, because so many of the poisonous substances would be taken out frequently to make up other compositions, that there would be great danger of their being left out?

Yes, of course that must always arise, but I believe that in well-regulated shops now they never put down upon the counter any dangerous poison. The practice in well-regulated pharmaceutical shops is to take the laudanum or arsenic bottle from the shelf, use it for the dose, and immediately return it to its place.

851. *Earl of Derby.*] The Committee have to consider the amount of legislation necessary for irregular shops?

I think that some regulation, by which some compartment of the shop might be set aside for containing these powerful substances (it might be made a little easier than the Bill proposes), would be a great safeguard to the public.

852. *Lord Rossie.*] How would you meet the case of opium, where labouring men come to the extent of 200 or 300 a day for opium?

(37. 7.)

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I think

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I think there ought to be some limit to that; but even now there is a difficulty. I heard, only the other day, of a gentleman in the City who went into a shop to procure some laudanum where he was not known. He asked for a drachm of laudanum, it was for the toothache, and the person refused to serve him; for many chemists now are quite afraid to sell poisons in the present uncertain state of the law. The gentleman went into another shop, and they would not give him the quantity that he asked for, but they gave him 25 drops, and no more. I doubt whether, at the present time, except in the low class of shops, any labouring man could go in as he pleased and get served.

853. Earl of *Derby*.] He might get any quantity in the low class of shops?

Yes. If there was not time to consult a medical man, the better way to meet the case would be, that the dose should be swallowed in the presence of the druggist.

854. Lord *Rossie*.] Do you not know that in many large manufacturing towns they put down their penny and get opium?

Yes; and I am afraid that a bad use is made of it in that way.

855. That is done to a great extent?

Yes.

856. To the extent of as many as 200 a day?

I was not aware that it was so large as that; but I am aware that in the factory districts there is a very large sale of opium. If you allow the purchase of a pennyworth, you must allow the purchase of an ounce, and the drug certainly causes a large number of deaths annually, 37 per cent.

857. Supposing you were to stop that sale in the manufacturing towns, do you not think that there would be other low shops that would take up the sale?

I think that they should all be placed under the same restriction.

858. Do you think that you would be able to stop the sale of opium?

I am afraid that a smuggled sale might go on, and that is one of the difficulties in dealing with a question of this kind; there are so many persons who are ignorant, and who are perhaps easily moved, for the sake of gain, to deal in these things, quite a low class of sellers, who have them now in their hands. I have a list of the number of persons now engaged in the business of druggists in this country. There are about 15,643 persons engaged in the sale of drugs and chemicals through England and Wales; the number of pharmaceutical chemists, represented by Mr. Bell and others, amount to 2,500. Then in 1831, according to the Registrar-general's return, the chemists and druggists in England, including all those who dealt in drugs, amounted to 5,835. In 1851 there was a more special classification, and it was found that under 20 years of age there were 3,644 persons engaged in the sale of drugs, and 20 years of age and upwards, 11,999, making 15,643; and in that you have a great medley and variety of classes, some who will not sell at all, others who will sell under caution, and others who will sell anything on application.

859. Marquess of *Salisbury*.] Is there not some danger, if the law is too strict, that more evasion would be resorted to than is the case at present?

Yes; and I think that the law might be made more strict without making it too strict: for example, I would suggest with respect to keeping these medicines in a shop, that there might be a central compartment of the shop, where only those substances which your Lordships think necessary to place in the list, should be kept. At present that rule is followed, more or less, in every well-regulated shop. There is always a separate part where you find the strychnia, the arsenic and other substances. Then I think that if there were 13 substances, and your Lordships struck out the Index Expurgatorius, Schedule B. altogether, and the list of substances in Schedule A. was reduced to the 13 which I have mentioned, there would be a very small amount of trouble given to the druggist compared with the amount of safety that the public would receive. I can only name one drug that would give trouble, and that is laudanum; that is a difficulty. But when I tell you that there are so many deaths arising from the incautious use of it, and that it is used for homicidal purposes among children, the omission of it would be like legislating for three-fifths of the deaths, and leaving the two-fifths

fifths to go on as they have done, and probably to increase, if there were a restriction upon all but laudanum.

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860. Lord *Rossie*.] If a small limit was put upon the quantity of opium, might it be sold without the other precautions; such as that a druggist might sell a pennyworth, but no larger quantity, and without coming under certain restrictions; would that have any effect?

Yes; because that would meet the case of many poor persons requiring the drug without any improper intention; they could supply them with what they actually require without any unnecessary restriction.

861. Earl of *Derby*.] What quantity of laudanum would be obtained for a penny?

About 20 to 25 drops; that would not be a poisonous dose for an adult.

862. If 20 or 25 drops were administered to an infant with the view of quieting it, what would be the effect?

It would cause death. If an adult came into a shop, and asked for a dose of laudanum, I would suggest that he should be permitted to drink it in the shop. It has been suggested, which undoubtedly would take place, that a person could go to 50 shops and get 50 times 25 drops, which would be just the same as allowing the person to buy it all at one shop.

863. Have you ever considered the effect of requiring that after a certain time no person should be allowed to sell any poisonous substance without having received a licence upon examination?

Yes, I have; and I think that it would be an excellent plan, if it could be carried out, to allow the present possessors of druggists' businesses to go on for a certain period; that they should then be registered and licensed, and that after another certain period to be named, no person should be permitted to practise that business without a licence. I would let the old ones die out.

864. Or the register might be allowed to expire?

Yes; but I would require a proof of education after a certain time; that you could not require from persons at present practising.

865. Supposing that a period of five years were fixed, and that persons registered should receive their register available for five years, but subject to the condition that before the expiration of the five years they should qualify themselves to pass a certain examination in the use of certain specified scheduled poisons, do you think that that would be a good plan?

I think that in that way you would get rid of a great number of those persons who ought not to deal in drugs, because they would be frightened at the examination, and would give up business.

866. Do you think that there would be a danger of a deficiency in the country districts of properly qualified persons, if they had a notice that at the end of five years those who were qualified would have a monopoly of the business?

I do not think that there would be any deficiency.

867. Lord *Rossie*.] How would you propose that the examination of those persons in the country should be conducted, with a view to ascertaining whether they were duly qualified?

There could be only one proper Board for it (and that the French have been obliged to come to); that is by establishing a competent Board in London for England; in Edinburgh for Scotland, and in Dublin for Ireland.

868. All parties would have to go to the metropolis?

Yes. The French tried the plan of having first a high-class Board for examining men of good standing and professional information, corresponding to our pharmaceutical chemists, and then a secondary Board, called the communal juries, who were men who had practised in the country, and they formed a Board of four or five, who examined, and gave a licence for practising in that particular district, but it gave rise to so much abuse, that it was abandoned, and a law was passed that they must all go to a College of pharmacy to be examined, and that is at Paris, Lyons, or some other city.

869. Earl of *Derby*.] Do you think that some subordinate authority might be

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authorised to grant licences of a second class, leaving those of the superior class to apply for a first-class licence, for which they should come up for examination at the central Board?

I think that they might come up to the central Board, and you might have a licensing body, and that licensing body might be allowed to hold a minor examination.

870. In that case you would compel every country druggist to come up to London before he could be licensed to sell any of those scheduled poisons?

Yes. Those poisons which are scheduled really do demand a good amount of information in dealing with them, for the safety of the public.

871. Are not those scheduled poisons, or some of their preparations, in such common use, that excluding a person from the sale of them, would practically exclude him from the business of a druggist?

No. I have already suggested to your Lordships that the number in the list might be reduced from 23 to 13. There is arsenic: there is only one important medicinal preparation of arsenic, and that is called Fowler's mineral solution; the Royal Colleges of the three kingdoms were so impressed with the necessity of colouring poisons, that they ordered the compound tincture of lavender to be put in it, for the very purpose of guarding from accident. That is the principal medicinal preparation of arsenic, and that is not much used except in certain parts of the country, in the fenny districts, where ague abounds; it is taken as a remedy for that disease; but I think that it is such a dangerous preparation that on no account should it be put indiscriminately either on the counters or on the shelves of shops; and in very few shops is it so put at present. Then there is corrosive sublimate: that is seldom used in medicine. Arsenic in powder as a rat poison, is very much in demand; corrosive sublimate not so much; it is used for bronzing gunbarrels. Then there are the alkaloidal poisons: I doubt whether any person ought to be allowed to sell a poison of that kind without being qualified. Then there is prussic acid; and cyanide of potassium, which is very much used now by forgers. Almost the sole purpose for which it is employed is for coating base silver coin; it is also used to some extent for the purposes of photography and electro-chemical plating. Then there is the essential oil of bitter almonds, which is not used in medicine at all, and with regard to dispensing, it is used as an almond flavour for pastry; but as prussic acid is contained in it, the sooner its sale is prohibited the better. Then there is opium and laudanum; and that presents a difficulty, for laudanum is very much used. With regard to chloroform, I do not think there can be any objection to that; it is a good deal used by medical men, but not for any other purposes except for making varnish and taking out grease spots. The demand for chloroform by the general public is not very large. It is very large by the profession; and if there were a large demand by the public, I should immediately suspect robbery or thieving, or something improper. Then oxalic acid and salt of sorrel would be perhaps the substances in the whole list which are most frequently sold to the public; oxalic acid is used for cleaning boot tops and bleaching straw; but it gives rise to a great number of accidents, and causes six per cent. of the deaths from poison. Then there is the tincture of aconite, upon which certainly there ought to be some restriction. There is nux-vomica; the only use to which it is put is for poisoning vermin. So that in answering the question generally, I would say that, looking to the 13 articles, I do not think that the business of a country druggist would be materially interfered with if the sale of these substances was restricted.

872. Are there no drugs in ordinary use in which any of those articles are component parts?

I would propose, in order to remedy a difficulty of that sort, that Schedule B. containing the exceptional preparations, should be entirely struck out, so that your Lordships might have only a concise list, which may be still further reduced; that your Lordships should say, These articles must be sold under the restrictions of the Act, and kept separately, if not in a closet, at any rate in separate compartments, from other things in the shop.

873. Lord *Rossie*.] You recommend 13 articles?

Yes; because most of the cases of poisoning that I have had to deal with have

have included some of these articles, and in most of those cases I think precaution might have saved life.

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874. The pure poison you would subject to these regulations, but a mixture of it you would not include?

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I think you must leave that, or else it would give rise to the objection that it would so hamper the business of a druggist that he could not carry it on.

875. Earl of *Derby*.] With regard to dealing in those 13 poisons, you would be in favour of the system of present registration, and future licensing after examination?

Yes.

876. *Chairman*.] Would the future registration apply after a term of years, or would you give a license for life to all those who are in the habit of dispensing those drugs?

There are a great number of persons at present engaged who ought not to be engaged in this business; small grocers and oilmen in the country. I think if some regulation, suggested by your Lordships, could put out that class altogether, it would do away with two-thirds of the accidents that occur.

877. Earl of *Derby*.] If a period of years were allowed to each of them during which they must either qualify, or at the expiration of the period give up business, you think it would be advantageous?

Yes.

878. *Chairman*.] What, in your opinion, would be the best constitution of a council to superintend the granting of these licences?

A council formed, say of one or two members of the Royal College of Physicians in each country, and of the Pharmaceutical Society, or of the Apothecaries' Society; at any rate I would have on the Board five or six men, some acquainted with drugs as well as some acquainted with medicines and their properties; I think, then, that there would be great security in having men of skill and knowledge upon the Board, and in that there would be a very great provision for the safety of the public in reference to the dispensing of drugs.

879. Have you any knowledge of the existence of any amount of jealousy between those bodies?

There is, I believe, a great jealousy among them; the Apothecaries' Society and the Pharmaceutical Society are very much opposed. The Apothecaries' Society rather invade the Pharmaceutical Society's privileges, by the fact that there are some 8,000 or 9,000 men now in this country licensed by the Apothecaries' Society who act as druggists, and sell drugs, as well as practise medicine. Then there are a great number of pharmacutists, without any medical certificate at all, who prescribe for patients, and it is a great difficulty in this country that we have one body quite incompetent to prescribe invading the privileges of another without any examination, while the one who is competent is invading the business of the other, and that creates a conflict of feeling.

880. Lord *Rossie*.] You think that a body might be selected as an examining body?

I think so.

881. *Chairman*.] Would you recommend that that body should be constituted in the Bill at once, or would you think it better that it should be left to any authority?

My opinion is clearly this, with regard to suppressing or restricting the sale of poison, that society would be in a better position by having a competent class of dealers than by very close restrictions regarding the keeping of the poisons.

882. Admitting that; supposing the Committee were of opinion that it were desirable for the future to have an examination by a public body, do you think that the examining body should be constituted by the Bill?

I have thought with regard to that that a large body need not be selected; that four or five men should be taken from the College of Physicians and the Society of Apothecaries: whether your Lordships would think that the Pharmaceutical Society occupy such a position that they should furnish members or

A. S. Taylor Esq., not, of course it is not for me to say ; but they have not yet the educational position that the College of Physicians and the Apothecaries' Society possess.

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883. Lord *Rossie.*] Are there any other societies besides the Apothecaries' Society and the Pharmaceutical Society ?

Not with reference to the sale of poisons or medicines.

884. So that if you selected from each of those two bodies, you might get rid of any jealousy which exists between them ?

Yes. The Pharmaceutical Society have done a great deal for improving the status of the druggist. Whether there are not one or two members of that society who, from their experience, would be proper persons to add to the Board of Apothecaries and Physicians is a question for your Lordships.

885. Earl of *Derby.*] Supposing the Board to be composed of members of the three Societies, would you require that the certificate should be granted by the full Board, or that one or two members of the Board should be entitled to examine and to grant a license, signing his or their names ?

I think that two or three would suffice, at any rate at first, until you had worked up a more competent body of men.

886. Then you might form a Board which should consist of 10 or 12 individuals, any three of whom joining together might be sufficient to grant a licence or certificate ?

Yes.

887. *Chairman.*] Do you think that such a Board could be made self-supporting by small fees ?

I think it might, and I think that the chemists and druggists, by adding a little to the price of the poisons, might contribute that fee, and they would be rendering a great service to the public likewise.

888. Earl of *Derby.*] Would you contemplate different classes of licences ?

The only ground, at present, would be just to include the lower class, which it would be hard to throw out, but merely giving them the privilege of vested interest for the present. I would only contemplate hereafter one class of practitioners, of well-informed men, because either a prescription is to be made up well or badly ; and with regard to many druggists now, I feel almost a fear in writing certain prescriptions, or in recommending persons to take them to certain shops. Some druggists, who are exceedingly careful, have an enormous business on that account, for people send to them from all parts of London, because they fear to send to other shops.

889. Do you think that the fact of a first and second class certificate would not tend to produce a degree of emulation in the profession which would generally improve the whole ?

I think that a bad effect of a second-class certificate would be, that a certain number of persons would prefer it to the other.

890. What makes you think that that would be its effect ?

Probably the diploma or certificate would be cheaper, and it would be made more accessible to them ; we notice a great deal of this in medicine.

891. Lord *Rossie.*] Do you think that if due notice, either in the shop or some other place were given, that the keeper of the shop had a first-class certificate, it would induce the public to resort to it ?

I think so.

892. Earl of *Derby.*] Do you think that supposing there were two classes of certificates, a person being entitled to put up over his door " First-class pharmacist," would give him an increase of business as compared with a second-class man, which would make it worth his while to apply for it ?

I think so.

893. Would not that be an inducement to the improvement of the profession ?

Yes. We only notice this, that a class of persons get into the medical profession who aim at procuring the cheapest licence in the shortest time, at the smallest cost that they possibly can, among the Society of Apothecaries, both in this country and in Ireland ; but with regard to that, we always look with higher

higher respect upon a man who has taken out two or three diplomas than upon a person who is contented with one. A. S. Taylor, Esq.,
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894. Would you contemplate also any examination or licence for persons acting as assistants to druggists, under the head of, say, "Passed Assistants," so as to prevent the dispensing of poisons in a druggist's shop by a mere apprentice? 30th June 1857.

Yes; I think that would be a very proper regulation with regard to the dispensing of such substances as those which are mentioned in the Bill.

895. I am speaking of the persons employed under those who keep shops?

Yes; and a great number of fatal cases have occurred from poisons being supplied by that class of persons.

896. Although a druggist might take a lad as his apprentice, he would be made liable if that apprentice, not being a passed assistant, should dispense any poisons in his master's shop?

Decidedly so; that would operate very well.

897. Lord *Rossie*.] It has been stated to the Committee that there is a great difficulty in getting those assistants; that the numbers who apply are too few?

I think it is partly the case, because they are paid so badly.

898. Earl of *Derby*.] Unless the master had a passed assistant he would dispense the poisons himself?

Yes.

899. Duke of *Somerset*.] In what period, from the present time, do you think we could expect to get a number of chemists and druggists educated to a degree sufficient to pass such a Board as that which you propose. Supposing that you were to begin with the register now, at what period might we fairly fix after which no person should be allowed to sell without passing an examination?

I think that a fair latitude would be the period of five years.

900. Do you think that in this country, with the scarcity of chemical knowledge, which is admitted to be the case, in five years a sufficient body of men could attain that information as head people keeping shops?

Yes; I think that within five years you would not have a large body of them, but you would have a very good nucleus for working on. There are many young men now who hardly know what to do with themselves, and they do not find that they get any benefit by going into a druggist's business; they have no reason for studying in a scientific manner.

901. Where could they get such an education at present?

Some of them obtain it at the chemical and pharmaceutical lectures at the medical schools, others at the pharmaceutical schools, and others at private laboratories; but the larger number obtain their education by being taken into a shop, and by being taught there.

902. Lord *Somerhill*.] Would you allow a person who had not himself a certificate to sell those drugs, provided he had an assistant employed in his shop who was so qualified, or would you make it a *sine quâ non* that the shopkeeper himself should be the person responsible?

I think if you were to make the shopkeeper responsible for the act of his assistant, and require a competent assistant, that would meet all that would be necessary. There was a case last summer in which a boy of 14 or 15 served out black drop instead of black draught; and I have known a person poisoned by going in and asking for opening medicine, and being served with opium medicine.

903. Lord *Rossie*.] You said that you thought if there were two classes of certificates, the difference of expense would induce many persons to apply for the second-class certificate; why should there be a difference of expense beyond the expense of education?

I only presume that with a second-class certificate there would not be perhaps the same rigorous or expensive course of instruction required.

904. *Chairman*.] Supposing the Committee were inclined to recommend such a Council of Examination, what would be the best way of constituting it?

I think that three members from the College of Physicians, three from the

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Apothecaries Society, and three from the Pharmaceutical Society, would be sufficient. I hardly know that I could name to you the mode of electing them; but I think that three men chosen according to their knowledge and experience and position in their respective societies, would be the proper mode. I think that that council of nine, with a power in three to examine and to license, would meet nearly all that would be required. I think that three taken out of each corporation, if the Secretary of State were allowed to name them, would do. I do not know whether you would allow the Societies themselves to choose them, but you might easily find three men competent enough in each of those three societies.

905. Would it be the best system to allow each of those bodies to elect three persons to represent them, or do you think that the selection of the members of the bodies should be left to the Secretary of State?

I think that it might be compromised in this way: the Secretary of State, of course, would act upon advice in such matters. If six names were presented from each corporation of the members who were thought qualified for the purpose, then the Secretary of State might be allowed to make his selection of three out of the six.

906. There is no other body that occurs to you, excepting the three that you have mentioned, from whom such a selection ought to be made?

No, there is not; it requires a knowledge of medicine, a knowledge of chemistry, and a knowledge of drugs—all three; and we have no body in this country, beyond those which I have mentioned, who have any cognizance of such matters.

907. Lord *Rossie*.] There are certain vendors of medicines and practitioners who prepare their own medicines, such as, I believe, in the case of lobelia?

Yes.

908. Would such a person have to submit to such an examination by this Board?

Yes, he would; I would say that all persons who prescribe and dispense ought to submit to it.

909. Do you not think that such a person would be looked upon with suspicion by this Board, and would fail to obtain a certificate, and therefore not be able to practise?

Yes, I think he would; with regard to the examination, that would be matter for consideration; it would not be, I presume, in reference to medical practice; I have not understood it so; it would be rather in regard to the competency to sell drugs.

910. After five years a homœopathic doctor might not prepare his own medicines and dispense them, without being subject to an examination before this Board?

Not if they contained the scheduled substances; I am restricting it to 13.

911. Marquess of *Salisbury*.] How would that examination affect the patent medicines?

It would affect them undoubtedly. I have made a list of what patent medicines there are, and what they contain. The principal patent medicines are 26 in number; 10 of them contain opium, three contain arsenic, four contain tartar emetic, seven contain corrosive sublimate, one contains Spanish flies, and one contains salt of sorrel; I have confined the patent medicines to those articles which are contained in the schedule. Now I think that the general answer to the case put would be this, that no person under any pretence whatever should, upon his own statement, be allowed to deal in those articles, if we are to regard the safety of the public. He ought to have a fair hearing, but he ought to satisfy the examining members of the Board that he does know what the properties of those things are, and if he does that, there can be no difficulty.

912. Lord *Rossie*.] If he knows that such a quantity of such a medicine would poison a person, and what its effects are, you think that that would be sufficient?

Yes.

913. *Chairman*.]

913. *Chairman.*] With regard to the constitution of the Board which you propose, a Board which is appointed, and which is to have the exclusive right for the future of giving licenses to persons to sell certain poisons, there are certain persons, such as homœopathists (and there are a large number of persons who believe in that system of medicine), and there are homœopathic druggists; how far would it be considered fair to bring them to be examined for the sale of these poisons before a body of persons composed of those whom they consider hostile to their views?

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I hardly know how the homœopathic medicines would come into the schedule at all, for I have examined most of the globules, and I never found in them what was professed to be there; in point of fact, if they put arsenic in a globule, and arsenic is found there, they would be involved in the penalties of the Bill, but the doses are so infinitely small, that according to my experience they are beyond the reach of any test that we can apply for the discovery of poison.

914. *Lord Rossie.*] The common tincture of aconite would of course come under the restriction of your poisons?

Yes, it would.

915. *Duke of Somerset.*] In France there is an examination, and they have homœopathy there as well as allopathy; how does the system answer in France?

In France there is a college of pharmacy.

916. Does that college include some persons who practise homœopathy?

No; I believe it only includes those belonging to what we call the regular system.

917. *Earl of Derby.*] Would it be necessary, in your judgment, that veterinary surgeons should pass the same examination, as they would have in their practice to dispense many of these poisonous drugs?

Yes, they would; and I have a list of what they use; the substances which they use are, tartarised antimony, arsenic, opium, hemlock, Spanish flies, corrosive sublimate, and chloride of zinc.

918. Would you require that before a man could exercise the business of a veterinary surgeon he should be subject to an examination, because those substances are essential to his business?

Veterinary surgeons do not commonly act as druggists; the business of selling veterinary medicines is carried on generally by druggists in this country, so that the druggists are the persons dealing in such cattle medicines; I do not know of any instance in which a veterinary surgeon keeps a shop of that kind. Veterinary surgeons seem to give up all the dispensing; they act like surgeons of the Royal College; but I believe they do not generally supply the medicines themselves in England.

919. *Lord Rossie.*] They do so in Scotland?

In Scotland they may do so.

920. *Chairman.*] Supposing the Committee do not think it wise to go into the question of licensing; do you think that all those restrictions which are put in the Bill are necessary, or what modifications would you suggest; and then, after having stated that, will you state your opinion as to what regulations are necessary, supposing regulations are adopted by which persons who have shown by their examination that they are competent to dispense poisons shall be allowed to do so?

I have drawn up a few notes upon that subject. The observations which I beg leave to offer to your Lordships are, first, upon the assumption that there is no licence. I have marked the clauses one by one. The first clause upon which I have a note is clause 2, which repeals the Arsenic Act; and I have noted that I consider it better that there should be one general Act than two referring to the sale of poisons. I have already stated to your Lordships that, in my judgment, so far as I can ascertain, the Arsenic Act has been attended with some good, though not with all the good that it might have been if its provisions had been strictly enforced; but there is no person to enforce it; that is an omission with regard to the restriction upon the sale of arsenic. It appears to me that any reason which justifies an Act for the restriction upon

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the sale of arsenic, justifies it also with regard to corrosive sublimate and some other poisons. The Arsenic Act does not extend to arsenic in solution; that is a very important omission; so that the poisonous solution of arsenic appears to have been sold all over the country without any of the provisions of the Arsenic Act having been referred to. A man might go into a shop, and say, "I want half an ounce of white arsenic;" the person would say, "I cannot sell it; but I can dissolve it in water, and let you have it in that way." That shows that some improvement in the Arsenic Act is required. Then I come to the third clause, which has reference to the definition of the word "Poison;" that it should refer to a list of substances contained in the schedule. In the absence of a list of substances, the use of the word "Poison" would render any Act, in my opinion, inoperative; for there can be no strict definition of the word "Poison." Most poisons are used as medicines, and most medicines are poisons. Arsenic is a poison or a medicine, according to the dose and intention with which it is given; so that to exclude all substances because there are many poisons not entered, or to exclude some because they are medicines, would effectually prevent legislation. Then—I beg your Lordship's attention to this—some of the substances in the schedule, although they are undoubtedly poisons, are not used as medicines at all. Those are the cyanides of potassium, mercury and silver, the chlorides of zinc and antimony, the essential oil of almonds and almond flavour, the nux-vomica seeds and bark, and cocculus indicus; they are used for flavouring confectionery, and poisoning vermin; they are very active poisons, and it would be desirable, therefore, with such limited use as they have in dispensing, that they should stand in the list.

921. Duke of *Somerset*.] You define your poisons in that clause 3 to be those contained in your schedule, which is to consist of 13 articles?

Yes, for the purposes of the Act.

922. Lord *Rossie*.] And in that clause you would except the compounds?

Yes, I would except the compounds. The wording of the Act would go to the sale of the substances generally—arsenic and its compounds; but it would exclude, in regard to hemlock and some of the others, those which are used in medicine in the form of pills and extracts.

923. Then it would be referred to in Schedule A.?

Yes; it would be removing Schedule B., and merely putting restrictions on the articles in Schedule A., so that all medicinal preparations may be excluded.

924. Clause 3 states, "Poison shall mean any drug or substance mentioned or referred to in the Schedule A. to this Act"?

Yes; and then if there should be any ambiguous word in Schedule A. that would appear to refer to a frequently dispensed article, it might be amended. Clause 3 exempts all medicines made up on prescriptions. That would include some patent medicines; patent medicines containing opium would be included; for instance, asthmatic elixir, Battley's sedative solution and black drop. Unless we kept strictly to opium and laudanum, some word like that in the schedule would leave all the patent medicines free; but if you put in opium and its preparations, that would include Battley's sedative solution, Black drop, Godfrey's cordial, Dalby's carminative, and some other patent medicines: so that it will be necessary in the schedule to define precisely what is understood by opium and laudanum; it might be so expressed, if your Lordships thought that the others should be sold as they are now. Then with regard to veterinary medicines, they are exempt under the prescriptions of veterinary surgeons by the 11th clause.

925. Duke of *Somerset*.] You would leave that exemption?

I would, just as we do for medical men, because they are members of a veterinary college, and have undergone an examination. Clause 4 implies power in the Council to amend all the lists: I think that is a very proper provision, because a substance may be struck out if it is found inconvenient, or another put in if necessary.

926. Earl of *Derby*.] Do you think that the chemists throughout the country would have sufficient notice if an alteration, involving penal consequences, were made only by an Order in Council?

I think

I think they would ; I think it might be put in the Gazette, and advertised through the recognised organs of the pharmacutists.

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927. Lord *Rossie*.] Do you think that it would be advisable to have any other authority besides that of the Queen in Council ?

I think that, on advice given, and evidence taken, it might be said, "There is a substance which is introduced into this country, which is now getting into extensive use, and it is desirable to place that in the schedule.

928. You would not include the College of Physicians, or any other body ?

No, I think not.

929. You would of course exclude in that clause any compound ?

Yes. Then we come to clause 5 ; the sale to a person of full age, in presence of a witness of full age, known to the person selling the arsenic, and to whom the purchaser is known. This clause differs from the 2d clause of the Arsenic Act in this important particular, that it requires the witness to be of full age, which I think is a very necessary provision. In one case upon which I had to give evidence there was a most shameful evasion of the Arsenic Act, by causing a little girl of eight or nine years of age to stand upon the door-step of the chemist's shop, while the person went into the shop to buy the poison, and all that she could depose to was, that she heard the jingling of the scales, and nothing more.

930. All those poisons you think must be sold in the presence of a witness ?

Yes, I think so.

931. Did you hear the proposal that a certificate from a householder should be a sufficient authority ?

Yes. There is one point with regard to that clause, which is this ; that the person who sells the poison may be of any age, but the person buying the poison must be of full age, and the witness must be of full age. It is only a question whether the person selling the poison should not be either, as Lord Derby has suggested, an examined assistant, or the master of the shop. I think that that would be no very great hardship with regard to 13 substances ; it would be a hardship if you took 74, according to the old French system, and required the master of the shop, or an examined and skilled assistant, to serve out the articles mentioned in that schedule. As long as the unskilled class exists, there should be a person of full age. I made inquiry of a respectable druggist in London, who had been in business many years, about the sale of poisons, and he told me that for some years he had given up the sale of them, and that now he only sold laudanum, and that he only sold the drug in doses of 25 drops ; but if poisons were allowed to be sold with certificates, he should return to the practice of selling them.

932. *Chairman*] Why does he not sell them now ?

At present he feels in an uncertain state regarding his liability, and he would rather have nothing to do with it ; and that is the case with many druggists ; they will not sell even laudanum. There is more difficulty in some cases in procuring laudanum at present than there would be by the restrictions of this Bill. With regard to the certificate being signed by a clergyman, a medical practitioner, a magistrate, or two resident householders, I beg to say that I think the sale of the poisonous alkaloids should only be on medical prescription, and not on certificate at all.

933. Lord *Rossie*.] How would a person obtain cyanide of potassium ?

By certificate.

934. The certificate of a magistrate ?

A medical man, a clergyman, a magistrate, or two resident householders. Cyanide of potassium is very much used in silvering metals and in photography.

935. If I sent to a chemist I could not get it ?

No ; unless you had a friend in the profession, or you applied to a neighbour. A person must obtain a certificate from one of those parties.

936. Even laudanum and opium are included in your list ?

Yes.

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937. So that you could not get them in the country without getting the certificate of a magistrate, or two householders?

No, unless you limited the dose that might be sold. But I was going to make a suggestion here about the certificate, that a great deal of the difficulty might be taken away by having a continuing certificate; that is, a certificate which would still serve for purchasing; say that the certificate is issued in this way, that a person goes to a shop and buys a poison; let the person who sells it copy the certificate in the book, but let him stamp or endorse it to indicate that the poison has been sold, so that there may not be a constant application for a renewal of the certificate. Opium is frequently required, and it would be very troublesome to have to apply for a certificate whenever opium was wanted. A gentleman had the greatest difficulty the other day in getting only 25 drops, and I think if I went into many shops they would decline to sell it to me; they decline to sell to medical men unless they know them; some will do it, and others will not. The 6th clause refers to the date and circumstances of the purchase; they are very much the same as in the schedule to the Arsenic Act. The only difference is the entry of the name of the person giving the certificate, and they are not more troublesome than the entries in France. Supposing, in reference to the question which was put to me by one of your Lordships, that a medical man certified, I certify that So-and-so requires laudanum for use as a medicine, and that certificate were made continuous for six months, I do not see that that would be a great bar to procuring it for a lawful purpose.

938. In country places it might be?

Yes, in country places it might be; I would only suggest with regard to the 6th clause, whether it would not be proper that a druggist should have the option of selling poison or not, as he pleases; that he should not be imperatively required by the Act to do so; for there are some who strongly object to selling poisons at all.

939. The colouring would interfere with its operation (cyanide of potassium) for photography?

Yes, it would; that, I believe, by a subsequent clause, whenever any good reason is given, may be dispensed with.

940. Earl of Derby.] This clause requires that every bottle containing any such poison shall have the word "poison" cast or moulded in raised letters; do you consider that a necessary precaution?

I think it a very good additional precaution.

941. Is not there this danger, in the first place, that in country places persons come and bring their own bottles for the purchase of poisons; and in the next place, the danger that after obtaining this bottle with the poison in it, the bottle will be used for other purposes?

If it is, it will still always carry its own precaution, the word "poison" being on it.

942. But finding it was not the fact that it contained poison, it being applied to other purposes by the poorer class of purchasers, would not that diminish the security arising from the raised letters?

Yes, as far as the ordinary use of bottles in households went; but as far as the druggists' shops are concerned, there would be the same feeling with regard to it.

943. Would you prohibit drugs being sold in a bottle brought by a purchaser, provided a label was put on it?

I would prohibit every one of the articles mentioned in the list of 13 to be sold in that way; I would not make that prohibition with regard to drugs in general. This (*producing a bottle*) is a blue glass bottle, which I think should be used for substances intended for external purposes. The blue glass gives a good distinction of colour; and this shows that the objection stated is not considered by the druggists a very great one, for some have been in the habit of sending out those blue bottles, containing substances for external application, for some time; and although they are liable to be used for other purposes afterwards, still there is a feeling that whatever is contained in a bottle of this kind should not be taken internally. I think, generally speaking, persons would be

be sufficiently protected if they put a medicine into a poison bottle, for that would prevent persons taking it.

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944. Lord *Rossie*.] Does raising the letters add much to the expense of the bottle?

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I think not; at first it might a little; but I was in Sunderland only a few days back, and made inquiry upon that point at Hartley & Co.'s works there, and they told me that it was the cheapest colour to use for glass; and when I mentioned the purpose, they said they thought it might be made after a time as cheaply as white glass.

945. In the meantime persons selling would have a difficulty in getting the bottles, and they would be put to additional expense?

I believe a London druggist finds no difficulty at present.

946. I mean country practitioners?

Certainly, there might be a difficulty there. The labelling is very well for people who can read, but a label is always liable to come off; and I have known instances where a phial has been found in the pan of a water-closet without any label at all upon it, and where some evidence was necessary to know whether it had contained poison or not. I am speaking now of a criminal case; but with regard to ordinary accidents from poisoning, the colour of the glass by day, and the angular form and roughness by night, would always give a sufficient intimation of the possible danger of using the substance. It would be impossible to legislate upon this subject without causing some inconvenience and expense. It is just a balance of whether we can possibly save life at the expense of a little trouble and cost.

947. The question is as to enforcing the use of those bottles; would you propose that it should be enforced by a penalty?

I suppose it would be under the Act, and the violation of that clause would be penal.

948. Whose business would it be to prosecute?

That is the very difficulty that exists with regard to the Arsenic Act; some prosecutor must be appointed.

949. Duke of *Somerset*.] Now as to clause 8, assuming that you have your schedule of 13 articles, would you propose to keep that clause as it is?

There is only one article to which colouring perhaps will not apply, and need not apply, and that is chloroform; the colouring matter of archil does not readily incorporate itself with it; but with regard to all the others, I should propose that it should be retained to all those that are colourless. In the case of tincture of aconite, laudanum and opium, you would not use it, nor the essential oil of almonds; but with regard to prussic acid I should think it a very proper thing. This (*producing a bottle*) will give the Committee an idea of the colouring of prussic acid by archil; there is one ounce of water to ten minims of archil, the quantity mentioned in the Act, and this is the archil itself.

950. Retaining the colouring matter for these 13 articles that are colourless would not interfere with the purposes for which they are required?

With regard to the alkaloidal poisons, I do not know that there is any necessity for colouring; still I should suggest that they should not be sold except under medical prescription.

951. You would have a separate regulation with regard to some of them?

They are only sold in grains, and certainly they are colourless, and the necessity for colouring is where the dose is rather large. The doses of these alkaloids when sold would be so small that colouring would hardly be requisite. It appears to me a case in which we might except the colouring as to alkaloids; but with regard to arsenic, corrosive sublimate, prussic acid, cyanide of potassium and oxalic acid, the colouring should be made indispensable.

952. Lord *Rossie*.] Would not that preclude the use of cyanide of potassium for photography?

Yes; but those who are photographers could remove the colouring directly; it would not do in photography to use it coloured, certainly.

953. Therefore that would preclude the use of it for that purpose?

(37. 7.)

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Yes.

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Yes. With regard to colouring, arsenic is directed to be coloured by the present Act, and if it were rigorously carried out, I think it would save an immense number of lives in reference to the mistaking of arsenic for sugar and soda.

954. But it has not been carried out?

No, it has not been carried out as it ought to have been.

955. *Chairman.*] I think you stated that the colouring was more to prevent accidental poisoning than suicidal?

Yes; and we have the authority of the College of Physicians with regard to colouring the solution of arsenic to avoid mistakes, and those engaged in the use of poison for vermin find it necessary to colour it, so that we find a great protection in it.

956. *Lord Rossie.*] There would be a great protection if you could enforce it?

Yes. Then the colouring of solid and liquid poisons would undoubtedly come under the same head; of course, with regard to prussic acid, it might be a question whether, when wanted for a medical prescription, it should be sold coloured, but I think as much as we possibly can we should colour the colourless poisons. Chloride of zinc is not in this list which I have laid before your Lordships; I have here endeavoured to put in as small a schedule as possible of what ought to be shut up. In the 13 I have not included Burnett's liquid, and I have also excluded chloride of antimony. I have endeavoured to comprise the substances likely to occasion the greater number of deaths in this country; tincture of aconite and chloroform might be struck out; but I think that each substance should be well considered before it is struck out, because there are as strong reasons for retaining some as for retaining arsenic. Then with regard to colour, I think that indigo is the best for solid poisons, and archil for liquid, for they are both innocent substances, and give a strong colour, and although they can be removed like all other colours, yet they may serve the temporary purpose of preventing life being sacrificed through accident.

957. *Chairman.*] And they are cheap, and easily obtained?

Yes, they are. Then comes the 10th clause, as to poison given or delivered; I have no remark to make upon that.

958. *Duke of Somerset.*] Would you retain clause 11?

That is, the exemption of medical prescriptions and the exemption of wholesale dealing for trades.

959. It allows paper-stainers, for instance, to get as much arsenic as they please, though you say that it is most unwholesomely used?

Yes, it is so indeed; that is the difficulty; there is no doubt that it would be resisted; any attempt to prevent the procuring of arsenic would create a very strong feeling of opposition, although I think it an improper use.

960. You mean, that it would be resisted because of the effect upon the trade?

Yes; it is such a very cheap colour; one misfortune of arsenic itself is its exceeding cheapness.

961. People who have bought this paper have bought it in ignorance of its dangerous effects?

Yes; it is a very serious thing indeed, and it will be for your Lordships to consider whether something like the regulation in the Prussian rules should not be introduced, that the open sale of that green pigment containing arsenic should be prohibited.

962. *Chairman.*] The choice ought to be between some regulation of that sort, or the omission from the 11th clause, because by the Bill itself, a person wishing to get it for the manufacture of paper might always get it by certificate?

Yes.

963. Supposing the 11th clause were struck out, and that no regulation for prohibiting arsenic being applied to paper were enacted, any paper-stainer might obtain the arsenic by getting a certificate from a justice of the peace?

Yes.

964. *Duke*

964. Duke of *Somerset*.] Why is it necessary to retain the 11th clause at all?

In the first place, with regard to wholesale or retail dealers, I apprehend it is taken from the Arsenic Act; from the extensive use of arsenic it was found that it would be impossible to shut it out altogether.

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965. They would only get it by a proper signature?

Yes.

966. Why should not they get it by a proper signature as other people get it, without reference to clause 11; they would go through that form of obtaining it?

Yes; in point of fact they should be put in the position of ordinary purchasers; I apprehend that this clause has been introduced from the Arsenic Act, merely because at the time of the passing of the Arsenic Act it was found that it would be difficult to legislate except by some concession of this kind. I quite agree in the principle referred to.

967. Would it be difficult for persons who wanted to get a large quantity of arsenic for purposes of trade, to obtain that certificate which you have indicated in the former clause, and so to obtain the arsenic?

No, I do not think it would; if a man wanted 10 lbs. he might get it by procuring a certificate from a householder.

968. Lord *Rossie*.] Would it not be easier for him to obtain it than for a person wanting a small quantity?

I think it would.

The Witness is directed to withdraw.

Ordered, That this Committee be adjourned to Thursday next,
Two o'clock.

Die Jovis, 2^o Julii 1857.

LORDS PRESENT:

LORD PRESIDENT.

Duke of SOMERSET.

Marquess of SALISBURY.

Lord SOMERHILL.

Lord ROSSIE.

Lord TALBOT DE MALAHIDE.

THE LORD PRESIDENT in the Chair.

Evidence on the
Sale of Poisons, &c.
Bill.

JOHN MOORE NELIGAN, Esquire, M.D., is called in, and examined as follows :

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Esq., M.D.

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969. Lord *Talbot de Malahide*.] YOU are a Fellow of the Irish College of Physicians ?

Yes.

970. And one of the censors ?

One of the censors, this year and last year.

971. What is your duty as censor ?

As censor, my duty is merely to examine in the college, and to assist the president in carrying out the laws of the college. I am also one of the inspectors of apothecaries and druggists' shops under the Irish Act of Parliament.

972. Marquess of *Salisbury*.] What Act is that ?

The 14th chapter of the first year of George the Third.

973. Lord *Talbot de Malahide*.] You have also been employed by the College of Physicians in superintending the formation of the Pharmacopœia, have you not ?

In superintending the formation of the Supplement to the Pharmacopœia. I was not a fellow when the Pharmacopœia was published ; but I have published a work myself on Medicines and their uses.

974. The Supplement to the Pharmacopœia to which you allude was published last year ?

It was.

975. At the same time as that at which this Supplement was added to the Pharmacopœia, were not certain new rules made as to the mode in which druggists should keep certain dangerous drugs in their shops ?

Yes, at my suggestion.

976. Will you mention shortly what those rules are to which you allude ?

The intention was that all medicines of a dangerous nature specified by the college should be kept in druggists' and apothecaries' shops in angular bottles, and that all the simpler medicines, those not specified, should be kept in round bottles ; and also that all medicines dispensed by the order of a physician for external use should be dispensed in angular bottles, and those for internal use in round bottles.

977. There are also rules as to the mode in which these drugs should be dispensed at the shops, are there not ?

Yes, for sale ; that all dangerous drugs, as specified in our list, should be sold only in angular bottles or angular vessels, and the harmless drugs in round bottles or round vessels.

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978. *Chairman.*] Subject to that regulation, could poison be dispensed to any stranger coming into a shop?

Yes; we have no power at all in that respect. We considered that we had the authority to give these directions; but this has been rather a disputed question.

979. *Lord Talbot de Malahide.*] Under the Act of 1794 are there not general rules laid down for compelling the druggists to take certain precautions as to the parties to whom they dispense these poisons?

There are no rules as to that; only for keeping in their shops arsenic and its preparations under lock and key, and apart from all other drugs or medicines.

980. Can you give the Committee any information as to the effect of these rules?

Since the promulgation of these rules I have had an opportunity, and but a single one, of inspecting the apothecaries' and druggists' shops in Dublin, and that inspection is not yet completed; but in consequence of being told that I should be probably summoned by your Lordships, I last week completed the inspection of all the druggists' shops on the south side of Dublin, and some of the apothecaries' shops.

981. What do you mean by apothecaries?

We have an Apothecaries' Act in Ireland, a special Act of Parliament, by which no one is allowed to compound medicines by a physician's prescription, or to sell them on the prescription of a physician, unless he has passed an examination before this body. That is an Act of the 31st year of George the Third.

982. You have no druggists, in the English sense of the term, have you?

There are, to a certain extent, druggists in the English sense; we have druggists who sell drugs and poisons freely to the public, but who have no power, or rather are prevented from compounding physicians' prescriptions, so that we have two distinct classes in Ireland, druggists and apothecaries.

983. *Duke of Somerset.*] I do not clearly understand your distinction between the two. The druggists, you say, are at liberty to sell poisons?

Druggists can sell poisonous drugs, and all simple medicines, the same as any other individual can. Grocers sell them.

984. Are they subject to any Acts?

They are subject to the inspection by the College of Physicians, simply to see that their drugs are pure.

985. They are subject to inspection as well as the apothecaries?

Yes.

986. As I understand the matter, the only difference between the two is, that the druggist may sell a simple substance, and that the apothecary may make up a prescription. Is that the distinction?

That is the chief distinction between the two.

987. *Chairman.*] There is nothing to prevent the druggist from doing the same thing, is there?

He cannot compound a prescription.

988. *Duke of Somerset.*] But the apothecary may sell the simple substance?

He may if he pleases.

989. Therefore the apothecary may act as a druggist, but the druggist must not act as an apothecary?

Exactly so.

990. *Lord Talbot de Malahide.*] Did you find that the rules with reference to the keeping of these substances in particular shaped bottles were observed by these apothecaries and druggists?

Not by druggists in any instance, and by apothecaries in only a small number of instances. The matter has come under my observation more from my practice as a physician than from inspecting their shops.

991. *Chairman.*] Is there any person under your Act responsible for seeing that the provisions of the Act are carried out?

No.

992. *Duke*

992. Duke of *Somerset*.] You referred first of all to the Act of 1761; that Act only applies to Dublin?

It applies to Ireland.

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993. It is stated in the Act that it only applies to Dublin, and ten miles round it?

That is where it gives us the power of inspection; but in another clause of the Act your Lordships will find that there is a power given to the chief magistrate of each country town in Ireland to call two or more physicians to his assistance to inspect the shops in the country town. I may remark that that has never been carried into effect, although we have often endeavoured to get it carried into operation.

994. Am I to understand you, that, as far as the inspection goes, that inspection only applies to Dublin and its neighbourhood?

The inspection by the College of Physicians applies only to Dublin and its neighbourhood.

995. What security is there, then, as regards the druggists and apothecaries throughout Ireland?

A power is given in the Act, but it has never been carried into effect.

996. Therefore, in fact, the law is a dead letter beyond ten miles from Dublin?

It is.

997. Lord *Talbot de Malahide*.] Supposing that the College of Physicians were disposed to prosecute a party at a distance from Dublin for the improper dispensing of medicines, is there not a power of doing so?

There is no power. There is a power in the Apothecaries Company of Dublin to prosecute any person who infringes their Act, but that is merely any person who compounds a prescription if he has not been examined and certified by them to be a qualified apothecary.

998. Duke of *Somerset*.] You have said that the Act is not carried into effect throughout Ireland. As there is apparently power in the Act to carry it into effect, what has prevented giving efficiency to the Act of Parliament?

The power is given, but there is no provision for paying the inspectors. That is the first thing; and in the second place the mayors and magistrates in country towns would scarcely undertake voluntarily this Act unless the Government directed them so to do. I may remark, that we have in one of our reports to the Irish Government called their attention to this Act, and to the fact that it has never been enforced in any way, which report I have in my hand.

999. Do you think that it would be possible to carry the Act out, that the public feeling would be in favour of carrying it out if inspectors were appointed?

Unquestionably so.

1000. You think that nothing but the question of the expense of inspectors prevents the Act being carried out?

That and the unwillingness on the part of local individuals to take upon themselves a duty which is not a very agreeable one; in fact, although we inspect in Dublin, we are not paid for doing so, and we have no person to enforce the inspection; we do it voluntarily in our college.

1001. Lord *Talbot de Malahide*.] Do you think that there ought to be a public prosecutor in such cases?

A public inspector rather.

1002. A public officer, whose duty it would be to prosecute in case it was required?

Of course.

1003. The College of Physicians, in conjunction with the Society of Apothecaries, examine all parties who apply to be licentiates of the Apothecaries Company, do they not?

The examination is conducted in this way: the Apothecaries Hall examine all those who have served their time to an apothecary; the Act states for seven years; it is practically now for five years. If the Apothecaries Company reject the applicant, as unqualified, when he comes before them, he can be re-examined

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in six months ; and if again rejected, he can appeal to the College of Physicians, and we have the power then to examine him, and if we think fit, to license him as an apothecary, which has occurred in some 25 cases, as appears by the records of our college : the reason is, that the Apothecaries' Company have taken upon themselves to examine in the practice of medicine, and in the collateral sciences of medicine, in addition to pharmacy ; but when we examine an apothecary who has been rejected, we only examine him in pharmacy and in materia medica.

1004. No person in Ireland is allowed to dispense medicines without going through an examination ?

No one.

1005. And in case of any individual contravening that enactment, there is a power of prosecuting him ?

Yes.

1006. Is that power vested in the College of Physicians ?

No ; it is vested in the Apothecaries Company.

1007. That power is but rarely exercised, owing to the difficulty and expense attending it ?

That I believe has been very much the case with the Apothecaries Company ; but more recently the Government have considered that they could criminally prosecute any person who offended against this Act, and there have been lately two instances within my own knowledge of criminal prosecutions for infringing the Act.

1008. Marquess of *Salisbury*.] Under what Act does that power exist ?

As to the criminal power, I cannot tell ; that is altogether a legal question. The Apothecaries Act is the one to which I referred just now, namely, the 31st of George the Third, the 34th chapter.

1009. Lord *Talbot de Malahide*.] The 22d section of that Act states that from the 24th of June 1791 no person shall be permitted to open shop, or act as an apothecary until he shall be examined ?

Yes.

1010. Duke of *Somerset*.] Does that Act include druggists ?

Not at all.

1011. Then, as regards the procuring of poison, poison may be procured throughout Ireland from druggists who may dispense it, although they have not passed any examination ?

Yes, druggists and grocers ; and the dangerous use of poison is too facile in consequence of that.

1012. As the Act only applies to apothecaries as regards malicious poisoning, there is no security ?

None whatsoever.

1013. As regards suicide there is no security ?

None whatever.

1014. As regards accidental poisoning, there would be a security, I imagine, because a person would go for medicine to an apothecary, and not to a druggist ; is that so ?

He may go, as is very often the case, among the lower orders, to a druggist's shop to buy Epsom salts. I saw last week, in inspecting the druggists' houses, that there were packets of Epsom salts made up in pennyworths, and packets of oxalic acid in pennyworths of precisely the same shape, differing only in the label, but sold freely. A druggist told me that he sold weekly half a hundred weight of oxalic acid in pennyworths.

1015. Do you know for what purpose ?

I asked him ; and his answer was that it was chiefly for cleaning bonnets, and for cleaning leathers and brasses.

1016. Marquess of *Salisbury*.] Then this clause of the Act of the 31st of George the Third has been only acted upon in two instances, as I understand ?

The two instances which I referred to were of criminal prosecutions ; this
Act

Act has been acted upon in a number of cases, I would say some 30 or 40 cases, or probably rather more, since the Act was passed.

1017. Has it been acted upon of late years at all ?
It has been acted upon within the last three years.

1018. Lord *Talbot de Malahide*.] Has the power of the Act ever been disputed ?

Not that I am aware of.

1019. Marquess of *Salisbury*.] The 22d clause goes to state that no person is allowed to open a shop, or act as an apothecary, until he has been examined ; have these prosecutions taken place under the authority of the College of Physicians ?

No ; we have no power at all in the College of Physicians with regard to prosecution under that Act ; that is vested in the Governor and Company of the Apothecaries' Hall of Ireland.

1020. Have the Governor and Company of the Apothecaries' Hall in Ireland prosecuted these parties ?

They have, and recovered penalties, a penalty of 20*l.* in some cases.

1021. For what reason have they prosecuted them ?

Because they opened shop, and dispensed medicines, and physicians' prescriptions, without being licensed by the Apothecaries' Company in Ireland.

1022. How far was that from Dublin ?

Most cases have occurred in the very north of Ireland, a distance probably of 120 or 140 miles from Dublin ; and some in the extreme western districts, about the same distance.

1023. And the Apothecaries' Company resides in Dublin ?

Yes.

1024. Duke of *Somerset*.] You said, I think, that no person throughout Ireland can dispense medicines as an apothecary who has not passed an examination ?

Yes.

1025. That has been the law since the 31st of George the Third ; what effect has that had in the education of apothecaries throughout Ireland ?

The effect has been very good ; we have got an excellent and respectable class of apothecaries, well-educated men, and well acquainted with the qualities of drugs, for the purposes of compounding our prescriptions, which we consider a very great advantage indeed, and it is one which has, I am quite sure, prevented poisoning and accidents to a great extent in Ireland ; but unfortunately they have lately exceeded their proper province, and become physicians and surgeons themselves, so as to mix up the pure pharmacien with the practitioner of medicine.

1026. Lord *Rossie*.] You think that, from the knowledge which they have obtained, they consider themselves competent, and that people will trust them ?

Yes, to a great extent ; and they really are, to a certain extent, competent, for they receive a very fair education ; but it would be much better to keep the practice of medicine and pharmacy separate, I think.

1027. Lord *Talbot de Malahide*.] They are obliged to be examined before they get their licence to practise as apothecaries ?

They are.

1028. Where are they generally educated ?

They are educated very generally in the schools of medicine in Dublin ; they serve their time, it is supposed, for seven years ; as I said before, it is practically only five years ; they serve their time to an apothecary, and during the last year or two of that time they attend lectures upon anatomy, upon medicine, upon botany, upon materia medica, and they attend hospital for twelve months. That has been a rule made by the Apothecaries' Company of late years. Then, at the end of that period of two years, they are examined by the Apothecaries' Company.

1029. *Chairman*.] Has there ever been any complaint made of the constitution of the examining body ?

The fact of the power of appeal to us being exercised occasionally, shows that there is a complaint made, and I think a fair complaint, that they examine all

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students, those apothecaries' apprentices, in medicine, as well as in pharmacy, while we think it better the party should be a pure pharmacien.

1030. Duke of *Somerset*.] Can you give me any notion what the education of a young man would cost who wanted to practise, say, in a country town in Ireland as an apothecary?

He generally pays a small fee, varying from 30 *l.* to 40 *l.*, to his master to be apprenticed to him, in the first instance; he pays a fee of 5 *s.* to the Apothecaries' Company in Dublin to be examined in general education, and of course he has the expense of coming to Dublin to be examined, if he does not reside there; but for that money he is fed and kept for five years in his master's house as apprentices usually are. Then, at the end of three years, if residing in Dublin, he will have to pay for his lectures and hospital a sum of, in round numbers, about 15 *l.*

1031. Take the case of a young man residing in a country town?

Then he will have to live for two years in Dublin; but usually he lives in the house of an apothecary; and acts as his assistant; he is paid 10 *l.* a year, and is fed by the apothecary, so that, practically speaking, his expenses are almost less than if he resided originally in Dublin.

1032. That is only in case he is fortunate enough to find an apothecary in Dublin who will take him as an assistant?

I think there is always a sufficient demand for them. I have been engaged in teaching medicine for a number of years as a lecturer on the practice of medicine, and an hospital physician, and I have a large experience amongst apothecaries in that way. I think there is almost always a sufficient demand for assistants.

1033. Lord *Talbot de Malahide*.] As you have given a considerable degree of attention to the subject of poisons, would you say that cases of poisoning are common in Ireland?

I would say that they are not so common in Ireland as in England; but I am very certain that a great number of cases which occur are never heard of. Unfortunately, cases of sudden death are not, I think, investigated sufficiently carefully in Ireland. I will give the Committee, if they will permit me, a reason for that opinion. In Dublin, for example, the coroner's physician is paid an annual sum, and not by the individual case, and there is no provision for an expensive analysis of the stomach of a person who has died suddenly, so that the coroner's surgeon is naturally not anxious to over-investigate cases of sudden death; he is paid an annual salary, and therefore the less he has to do, of course the better for him. The coroner, for a similar reason, is anxious to get over his inquest as soon as he can.

1034. Marquess of *Salisbury*.] Is it the practice to have a surgeon regularly appointed to attend the coroner?

That, I believe, is only the case in Dublin, and some of the other larger towns of Ireland.

1035. It is not left to the coroner to select his surgeon?

No; the coroner selects his surgeon in the country towns usually. He is obliged by Act of Parliament, properly speaking, to select the last person in attendance; but in Dublin the surgeon has always been appointed by the grand jury, or appointed by the corporation.

1036. Is he paid by fee?

The surgeon is paid a regular salary in Dublin.

1037. Out of what fund is that salary paid?

Out of the taxes on the city of Dublin; the corporation pay a certain sum to him.

1038. Lord *Talbot de Malahide*.] The coroner in Ireland is generally a lawyer, is he not?

He is very often an illiterate countryman.

1039. A medical man is very seldom appointed as a coroner, I believe?

I can remember only about four instances in Ireland.

1040. There have been restrictions on the sale of arsenic for a good many years in Ireland?

There

There have been by the Act of Parliament under which we inspect, the Apothecaries' Act, and by the Act of Victoria, the Sale of Poisons Act of this country, which also applies to Ireland. But in no instance have I found that it has been carried into effect; and although the latter Act was in operation in the year 1851, last year, when for the first time we inspected the druggists' shops on the part of the College of Physicians, we found that in not a single instance was arsenic kept apart from other drugs or medicines, nor was it ever kept or ever sold mixed, nor did the druggists ever hear of the Act.

1041. Duke of *Somerset*.] They had never coloured it?

They had never coloured it.

1042. Lord *Talbot de Malahide*.] And had they never kept a record?

They had kept no register of that sort; some one or two said, "Yes, we have a record, for our own satisfaction;" there was no register. I may mention that in the inspection of the shops we have four censors of the College of Physicians, and with us are associated two apothecaries. We divide the town between us into the north and south sides, and one year we take the north side, and another year the south side. Last year, for the first time, the inspection of druggists' shops took place. I inspected the north side, and this year I have just completed, with my colleague, Dr. Barker, the inspection of the south side. I have made a short abstract of our report, in which there are some curious facts with regard to the sale of poisons. Possibly I may mention to your Lordships one or two singular examples. In one shop which we inspected, the arsenic was kept in an open crock in the shop on the same shelf with many harmless drugs; it was not coloured. The druggist stated that it is rarely sold. Strychnia, corrosive sublimate, and oxalic acid, are also kept in the shop, with no restriction; they are sold readily to all comers; of the latter about 14 lbs. a week. In the very next shop we examined, the druggist said that he sells strychnia in large quantity. He lately sold six drachms at one time to the agent of a large landed proprietor in the county of Kerry. All other poisons are freely sold. In another shop, near the shipping in Dublin, the druggist answered to me that arsenic was sold in immense quantity, always uncoloured. It was kept in an open vessel in the shop. The chief consumption was amongst ship captains for coating the bottoms of their ships. If asked for it by a purchaser for poisoning rats (I put the question to him), a young lad in the shop said, "Oh, sir, I always give cream of tartar." Instead of giving the customers arsenic for poisoning rats, he always sold to him cream of tartar. Oxalic acid and sublimate, and opium, were sold most freely. In another shop arsenic is kept in bottles in the front shop; it is sold only to those whom the druggist knows; it is sold uncoloured, but he keeps a private register. Strychnia is sold only by himself and one confidential assistant; chiefly to gamekeepers, in quantities of from a drachm to two drachms. Laudanum is sold to anybody, and in any quantity. We inspected 20 shops on the south side of Dublin, and in the previous year 17 on the north side. These were purely druggists' houses. In one of the wholesale druggists' houses we found, on inspection, that arsenic was kept in a loft in a large open cask, to which all the boys who were in the habit of mixing colours had free access. In his large grinding store, which he took us into to show us a specimen of a very excellent grinding-room, he was grinding white lead and ginger alongside each other in the same compartment, with the vapours floating about, and the workman very freely pointed out to us the excellence of the wheels for grinding ginger, taking his hand from the white lead grinding apparatus, and placing it on the ginger wheels. I certainly would not buy ginger if I was aware it came from that house. In all the shops we found that opium, laudanum, and the most active poisons were kept on the same shelf mixed with the most harmless drugs.

1043. Lord *Rossie*.] Did you find many other descriptions of poison sold?

That which was most freely sold in nearly every shop was corrosive sublimate; some shops sold as much as 8 lbs. and 10 lbs. a week of it.

1044. For what purpose?

Chiefly for graziers, for sheep-dipping purposes. In one house which we examined near Smithfield (we have a Smithfield in Dublin as there was in London), the druggist told me that he sold on market days 2 cwt. of arsenic to farmers; and in the country towns in Ireland arsenic is sold with the greatest freedom by grocers, and by dealers of every sort. I do not know whether your Lordships are

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aware of a very lamentable case which occurred in consequence of that lately in Ireland, viz., the poisoning of the Rev. Dr. Alexander, in which, I believe, I shall have to give evidence before the criminal court in the course of this month. I was brought down specially to see him; he had been unwell, and his daughter sent in to a country town in the King's County, near Tullamore, for some arrowroot. I saw the shop myself, a very small shop, in which arrowroot, rice, starch, sublimate, and arsenic were all kept in papers in drawers in the shop. The servant boy asked for a pound weight of arrowroot, and the lad in the shop in weighing it out found that he had not quite sufficient to turn the scale, and he opened the drawer and took out another brown paper parcel, and filled into the arrowroot sufficient to make up the pound weight. It was brought home to the house of Dr. Alexander (who was a son of the late Bishop of Meath), a mile and a half from the town; Dr. Alexander's daughter, a young lady about 15 years of age, went herself and made the arrowroot carefully, her mother being at the time absent; when it had been cooked, it was brought up-stairs to him; he tasted it, and told them that it had a nasty taste. The daughter, anxious to get her father to take the arrowroot, which the physician had ordered for him, took some of it, and said, "No, father, it has not a nasty taste." The man servant took three spoonfuls of it, and Dr. Alexander himself took five spoonfuls afterwards; they were all immediately seized with sickness and burning pain, and the young lady with great presence of mind got some mustard, took it herself, and gave it to her father and to the servant; they vomited, and she and the servant recovered, after three days' illness. I was brought down specially as a physician from Dublin to see the Rev. Dr. Alexander, in consultation with the country medical men, and I found him dying from the effects of arsenical poisoning; there were all the symptoms of it. He died the next day after my seeing him, poisoned by the arsenic.

1045. Were there any other poisons which in your inspection you found sold besides those which you have named?

These were chiefly what were sold.

1046. Lord *Talbot de Malahide*.] Is strychnine sold in country shops?

Yes. I may mention that in another case one of the druggists told us that he sold strychnia to anybody; also that he had been asked or written to in the previous week by a country gentleman for atropia, another active alkaloidal poison, and that it being a rather new substance, and 20 grains of it being required, he took the precaution of sending it through the medical man residing in the town near where the gentleman lived, solely because it was a new poison which was asked for.

1047. Lord *Rossie*.] Is much laudanum or opium sold by the druggists?

A very large quantity.

1048. By grocers?

By grocers in country towns.

1049. Do you know what it is used for principally; who are the parties that purchase it?

I tried to discover that as far as I could, and I was unable to do so; the druggists merely told me "Anybody that asks for a pennyworth of laudanum I give it to them."

1050. Marquess of *Salisbury*.] What quantity of laudanum or preparation of opium have you found sold in any case?

It is laudanum chiefly; and it is sold in pennyworths or two pennyworths; they also said that any quantity which a person asked for they would give; I asked a druggist in one of the large streets in Dublin, "Supposing you were asked for a pint of laudanum, would you give it?" he said, "Yes, to anybody."

1051. Lord *Rossie*.] Have any cases of poisoning from laudanum come under your notice?

Yes; there was a case of suicidal poisoning in which I was called upon to see a gentleman, in Dublin, some few years ago; he purchased in an apothecary's shop about two ounces of laudanum, and took it.

1052. Do you know of any cases of accidental poisoning from laudanum?

Yes; a short time since a case occurred within my own knowledge in which there

there was dispensed in an apothecary's shop laudanum in place of tincture of rhubarb to an infant; the laudanum was given by its mother, and the child died. In a second case which I was also cognizant of, the child recovered.

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1053. Marquess of *Salisbury*.] It was given by mistake?

It was given by mistake.

1054. Lord *Rossie*.] Do you think that it would be possible to put a restriction on the sale of opium and laudanum?

I think as regards the sale by druggists, if all druggists were licensed, it would have a great effect in preventing the indiscriminate sale of poisons.

1055. *Chairman*.] Do you see any practical inconvenience in a system of licensing druggists?

Not the least; and I took pains last week to ask some of the druggists in Dublin their opinions, and they wished very much to be licensed, provided they were not charged too high a fee.

1056. Had they any objection to an examination previous to the licensing?

I did not inquire into that.

1057. Do you think that that would be desirable?

No, I do not think there is any occasion for it as regards drugs.

1058. Then what advantage would you gain from a licence being given without any assurance of the competency of the person seeking the licence?

Because in this case I regard the drugs sold as merely an article of trade; that the person selling them does not require to have any knowledge of what he is selling any more than a grocer, who, however, I believe, for his own sake, ought to have a knowledge of the sugars or the teas which he sells; but the advantage would be that you would have a fewer number of druggists. You would have a check on them by an inspection by the Excise officer, from time to time, and any directions given under any Act of Parliament, as regards the shapes of bottles or the keeping of poisons apart, could be fully carried out; therefore I think the advantage of the licence would be very great. And, moreover, should any Act of Parliament be passed, if it were printed on the back of his licence, the druggist could not plead ignorance as to the Act.

1059. In the case of Dr. Alexander you stated an instance where the boy dispensing the arrowroot had mixed up with it some arsenic. A person ignorant to that degree might, under your proposed system, obtain a licence if he paid the money?

Yes.

1060. You do not think that it would be advisable to place any restriction upon persons allowed to sell things so dangerous to the public as poisons, such as that it should be subsequently to an examination which showed that they had some knowledge of the properties of the articles in which they were dealing?

As regards those two substances, they have a certain similarity of appearance; of course they are easily detected by a practised eye. I have myself known instances of well-educated medical students not knowing the difference between the two substances; but if they were always kept in different shaped vessels in these shops a mistake could scarcely occur, at least so far as foresight could prevent it.

1061. What were the circumstances which induced you to recommend that precaution with regard to the shape of the bottles in the recent regulations?

I have for a long time turned my attention to the subject, chiefly from having written a book on *Materia Medica*, and also having lectured for a long time on the subject. I might probably state that the way in which the idea arose in my mind was this:—A case of poisoning occurred in Jersey with strychnia, and at that very time I was writing a review of my friend Dr. Taylor's work, as editor of the *Dublin Quarterly Journal of Medical Science*, which I have been for some years. It accidentally struck me in considering some means of prevention, that while the label could be easily rubbed off, or while a nurse might easily at night mistake the colour of a bottle, the shape of the bottle which was felt by the hand would, to a great extent, prevent mistakes. I therefore took the opportunity, when I was appointed upon a committee by the College of Physicians, with

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reference to a question which was mooted first by the Irish Government to us in order to get a report upon the means of preventing the sale of poisons as far as possible, to bring forward this fact before my College; the College were immediately struck with its importance, and they directed me, with the aid of some of my brother Fellows of the College, to draw up this Supplement to the Pharmacopœia.

1062. Duke of *Somerset*.] You say that you drew up this Supplement to the Pharmacopœia to make the apothecaries, as I understand, keep their poisons in particular shaped bottles?

Yes.

1063. Has a rule drawn up by the College of Physicians the force of law over the apothecaries?

We think that it ought to have the force of law.

1064. But has it practically the force of law?

Practically speaking, it has as regards the Pharmacopœia. Hitherto, when the Dublin College of Physicians has, in conformity with the Act of George the Third, published a Pharmacopœia, the custom has been to apply to the Irish Government for a proclamation from the Privy Council, which had been always granted. The same custom exists in London with the College of Physicians here. But singularly enough, when with the intention of preventing poisoning we drew up this Supplement, we applied to the Government, and they declined to give us a proclamation. The answer we got was, that they thought that it was an abuse having given a proclamation before, and that there was no occasion for it. Therefore, after waiting for three months to receive an answer from the Government, we published it on our own responsibility, prefixing the quotation from the Act of Parliament, which we considered was our authority for giving these directions.

1065. Do the words of the Act of Parliament give you authority not only over the Pharmacopœia, but over the sort of vessel in which the drugs shall be sold?

The words used are, "directing not only the form and manner, but the various vessels and other utensils, and the materials of which such vessels or utensils shall be respectively made or composed." It cannot be said that we exceeded the law, and we thought that we were acting rightly in straining this provision for the public good.

1066. That applies, as I understand it, to all apothecaries?

And druggists.

1067. In Dublin?

These rules apply to all apothecaries and druggists throughout Ireland.

1068. Only that there is no power to enforce the rules?

I am quite sure the power exists in the law officers of the Crown to enforce them; we have no power.

1069. Then the mode of keeping poisons which you have explained to the Committee, namely, keeping them together in a drawer in brown paper, may go on throughout Ireland equally now as before?

Yes, and it does go on.

1070. Has the examination of apothecaries, while it has made it more difficult for apothecaries to obtain their licence, tended to increase the number of druggists who sell poisons, and who are not obliged to have a licence?

I cannot tell that, because the Apothecaries Act dates from the year 1794. I cannot say how many druggists there were at that time in existence. With respect to the number of druggists at present within the bounds of the city of Dublin, I inspected last year 17 druggists' shops on the north side, and 20 on the south side this year. They sell paints, oils, colours, dye-stuffs, and medicines, in any quantity and of any description, if not compounded from a prescription.

1071. Do you think that the sale of any of these dangerous poisons might safely be restricted to the apothecaries, they not being allowed to be sold by the druggists?

Certainly;

Certainly; I can see no objection to it, provided the apothecaries would adhere to their own business, and not go out of their shops to practise medicine and surgery.

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Esq., M.D.*

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1072. Lord *Rossie*.] In country districts could you get a sufficient supply of apothecaries to meet the wants of the population?

I think with respect to the wants as to poisons, one apothecary would be quite sufficient in any town.

1073. Have you seen the list of poisons in the Bill?

I have.

1074. In poisons, do you include all those in Schedule A.?

All those, and many more.

1075. You say that it is not required to have apothecaries throughout the country to sell those articles?

The only difficulty would arise as to paints, when arsenic is used as it is very freely for paint. It would be rather dangerous to allow an apothecary to retain in his shop the large quantity required.

1076. Do you not think that there are cases where laudanum is frequently required in the country?

I cannot see any instance, except for horse medicines, in which case it may be very easily sold by an apothecary.

1077. Would there be a sufficient number of apothecaries throughout the country to supply the demand for those articles in Schedule A., some of which are in very general use?

There is probably a difficulty there which your Lordship has started. It might be overcome in this way, that if a licence was granted, then a druggist could sell paints and colours and poisonous drugs. A dealer in a country town might combine that with some other business, as is done at present; he need not be exclusively a druggist; but any respectable general dealer might be licensed as a druggist, and have a separate compartment in his shop for these preparations.

1078. But you think that either for a druggist, or for any person obtaining a licence as a druggist, it would not be necessary that he should pass an examination?

No, not as a druggist.

1079. Therefore the only difference would be, that you would make parties selling these poisons in the country obtain a licence?

Yes.

1080. But you would have no security as to their knowledge of the poisons in which they dealt?

I do not think that there would be occasion for it.

1081. I suppose there are dispensaries in Ireland?

Numbers of them under the Poor Law Act.

1082. To those dispensaries do the poor bring their bottles?

They do.

1083. To get filled, according to prescriptions given to them?

Yes, cups and jugs, and various vessels.

1084. Can they get medicine from these dispensaries without any prescription?

Yes; they come to the physician himself, or the surgeon who attends the dispensary, and of course he gives them not a prescription, but the medicine.

1085. Is there any security as to the description of vessel which they bring not having been used?

None whatever.

1086. Have any cases come under your knowledge where parties bringing a vessel to obtain medicine have, from its having been used for some poison, suffered from it?

I do not call to mind any case of that sort; but there are cases I know in which
(37. s.) a person

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a person has got an external medicine in a tea-cup, and actually taken it internally, and been poisoned.

1087. But no cases have come under your notice in which the party has suffered from taking a medicine out of a bottle which had poison in it?

Not any. I know myself, from my own experience, that the physician to the dispensary either smells the bottle, or looks through the bottle, to see that it is tolerably clean, and if it is a dirty bottle, he will not give the medicine in it.

1088. You have stated to the Committee that you are in favour of bottles of a peculiar shape for certain drugs?

Yes; angular bottles are my idea, not quadrangular, as mentioned in your Lordships' Act.

1089. Would parties coming to a dispensary be able to procure these angular bottles, or would you, in the case of a dispensary, allow them to get the medicines in other bottles than angular?

What I would suggest there would be, that in all instances the physician of the dispensary should supply the bottle, taking care that it be again returned. At present, with regard to vaccination, something similar is done: the person is obliged to deposit 1 s., that he may bring back the child, and show that it has been healthily vaccinated. My idea is, that in case of medicines, the individual should deposit, say 1 d., which could be got back on returning the bottle; that, I think, would meet all the difficulties, either of putting the expense on the poor law, or of putting the expense on the individual.

1090. Then you think that, practically, there would be no great difficulty in carrying out that plan of angular bottles?

That is my opinion, and it has been proved in many cases in Dublin.

1091. Have you ever thought of the expense to which parties might be put, in the first instance, in procuring those angular bottles?

Yes, I have made particular inquiries about it, and I find that the first expense even of fitting up a shop in Dublin is very inconsiderable. I have inquired from one of our largest dispensing apothecaries in Dublin, and he says that the expense of making the alterations in his shop would not be above 5 l.; of course all the bottles at present in use will turn into use after a longer or shorter period, even where he is obliged to buy new bottles for dispensing.

1092. Then you think that in a large druggist's shop the druggist might procure sufficient angular bottles at an expense not exceeding 5 l.?

Yes, because in most of these shops they at present have some angular and some round bottles; it would be merely, in some instances, changing the label.

1093. Besides angular bottles, would you have any distinction in the colour of the bottles?

I do not think there is occasion for that; there could be no possible objection to it; but I think myself that the angular bottle system is a sufficient one.

1094. An angular bottle should indicate either an embrocation or a poison?

Yes; I see no difficulty in the case; the label would indicate the difference. I saw myself, in some of the shops, that if the apothecary's boy, or the druggist's boy, was asked for what is called tincture of cardamoms, a powerful cordial sometimes purchased by the poor, it and laudanum were upon the very same shelf, the tincture of cardamoms and the tincture of opium both together, and nearly of the same colour, and therefore a mistake might easily occur; whereas, if one was in an angular bottle, and the other in a round bottle, the difference would be at once detected.

1095. *Chairman.*] It has been given in evidence as the opinion of persons of considerable experience in this matter, that there would be a danger in the introduction of any bottle of a peculiar shape, as inducing a false security; do you agree with that opinion?

I cannot at all agree with it; if it was once known to the public, and once known to the druggist, that all angular bottles were, to a certain extent, dangerous, I am quite sure that it would be a great safeguard, and there would be care also taken in filling the bottles from what I may call the large reservoirs of poisons, or of simple medicines.

1096. Lord *Rossie*.] Would you have all compound medicines containing poison put into angular bottles?

No, not if intended for internal use; I would have simple poisons kept in the shops, or sold out of the shops, always in angular bottles; but those for internal use in medicine by a physician's prescription always in round bottles.

1097. Lord *Talbot de Malahide*.] In what kind of bottle would you put laudanum?

In an angular bottle.

1098. Lord *Rossie*.] What number of articles would you say should be included in the list to be sold in angular bottles; would you take them according to our schedule, or would you extend it to other poisons?

I certainly would extend that schedule.

1099. You would extend the schedule for that particular purpose?

Yes; I have been looking through your Lordships' Bill, and I see that some very active poisons are omitted; for example, caustic potash and caustic ammonia, which are in common use.

1100. How would you do in the case of powders, such as arsenic?

I would always have them kept in angular bottles; I would make it a rule, and that was what we intended.

1101. Could you have the large quantities of arsenic which are required put into angular bottles?

I would have it put in a large angular chest, with a lock and key; if the vessel is angular, I am satisfied.

1102. That is very well for the keeping of it; but in selling a large quantity of any powder which was of a poisonous character, how would you meet the difficulty which would arise as to getting a bottle large enough to contain it?

That could only occur, I think, with regard to arsenic, and there the colouring would be a sufficient protection.

1103. Then you would enforce the colouring with regard to arsenic?

Yes, and with regard to many other poisons also, which are colourless; I would not recommend the colouring of the vessels, but of the material.

1104. For certain purposes to which these powders, which are at present colourless, are applied, would not the colouring matter put in render them useless?

I am not aware with regard to arsenic that it would.

1105. But with regard to others, you stated that all colourless poisons you would have coloured; are there not many purposes to which these colourless poisons are applied where the colouring matter which you added would render them useless for the purposes to which they are now applied?

With oxalic acid that would be so, for instance.

1106. And cyanide of potassium?

Yes, when used for photographic purposes; but then cyanide of potassium would be always sold in an angular bottle.

1107. But there would be that difficulty arising in colouring all poisons?

There would, as a universal rule.

1108. If a party wanted a large quantity of any of these poisons pure, what precaution would you take, supposing it was too great a quantity to put into a bottle?

I do not think, except in regard to oxalic acid, that the quantity could make any difference, because the cyanide of potassium is never sold in a quantity too large to put into a bottle.

1109. Take the case of oxalic acid, for instance?

In the case of oxalic acid it would be very easy to say that if sold beyond a certain quantity, it might be sold colourless, as has been the case in the Act with regard to arsenic.

1110. And not in an angular bottle?

Not, when sold beyond a certain quantity.

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1111. Duke of *Somerset*.] With regard to the provisions in this Bill for colouring solid poisons with soot or indigo, and liquid poisons with archil, are they provisions which you would consider desirable?

I think they are very excellent.

1112. You think that archil is a good substance?

Archil I think is a very fit substance; it is harmless, and could not affect the qualities of the substances used. Indigo I think a far preferable substance to soot: I would scarcely allow soot to be employed in any case.

1113. Why do you consider indigo a preferable substance to soot?

Indigo when mixed with the arsenic does not give it a disagreeable appearance to the eye of the purchaser, and when wet or moist, it strikes a much darker blue colour than in the dry state of powder.

1114. Then you think it better to strike soot out of the Bill in that respect, and merely to leave indigo?

I think so.

1115. You have looked at this Bill generally?

Yes.

1116. Do you think the provision in the 5th clause a good one, namely, that poison shall only be sold to a person of full age, in the presence of a witness?

I think it a very good one.

1117. How would it apply to Ireland?

There could be, I think, no objection to it whatever. Our College of Physicians, at my suggestion, made another proposal, which proposal was forwarded to the Government in the first report which we made, at the request of the Government, on the subject. In the first instance, I made a proposal to the following effect, and the proposal was adopted by the College, namely, that no poison should, in any instance, be sold to the public except by the principal of the establishment selling it, unless when ordered by a duly qualified medical practitioner, or by an apothecary, "except wholesale, in such quantity as prescribed by the Act of Parliament, on an order in writing, in the ordinary course of wholesale dealing." My idea was this, that if you restricted the sale of poison to the principal of the establishment, he would take especial care both in the registering of it and as to the witnesses who were present while he was selling it; and I considered that no practical inconvenience, of much importance, could really occur to the public, from the occasional absence of the principal. Poison is not like medicine: medicine may be required in a hurry, but for poison a person can afford to wait; if he wants it for sheep-dipping purposes, he can wait or can send word, so that the principal of the house may be there. In that way I thought there would be an additional precaution were it enacted that the principal of the house should be the party selling; or probably it might be added to that, an assistant sufficiently qualified, or an assistant whose name was placed in the licence, that licence being renewed from time to time, as occasion might require. I think that they alone should be allowed to sell poisons, and not the young boys in the shops; and I found that this was the rule in one or two instances in Dublin. But I think it right to mention to your Lordships, that in a further report which was made to the Irish Government, the College of Physicians being afraid that, however desirable in principle this provision was, it might be attended with considerable practical inconvenience, retracted this proposal. That was the opinion of some of the senior members of our body, and therefore the College withdrew, in fact, the former recommendation which they had suggested.

1118. Was that proposal of yours intended to apply both to druggists and to apothecaries?

Yes, in the case of selling poisons; not in the dispensing of medicines.

1119. Lord *Talbot de Malahide*.] Is not there in the Apothecaries Act of the 31st of George the Third a section enforcing a certain qualification for the assistants of apothecaries?

There is.

1120. They

1120. They are obliged to have a certificate?

Yes; to pass a certain examination.

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1121. Duke of *Somerset*.] With regard to the next clause of the Bill, "Entries to be made regarding the sale of poisons;" do you think that an advisable provision to be adopted for Ireland?

Certainly.

1122. You would apply it to druggists as well as to apothecaries?

Yes, for the sale of poisons; not for the dispensing of medicines.

1123. With regard to the next provision. You have spoken as respects bottles; but with regard to poisons having a covering of tin-foil, and being distinctly labelled, do you think that a good provision?

I should prefer not to allow a poison to be sold except in a bottle.

1124. If these provisions were applied to Ireland, it would be of very little use to apply them unless there were some system of inspection, and some means of enforcing the law when made?

Certainly.

1125. Otherwise it would probably be a dead letter, as the former Act has been throughout Ireland a dead letter?

Yes.

1126. What suggestion would you offer for securing the due enforcement of the Act so as to protect the public?

The chief suggestions which I would offer would be the licensing, and an inspection by Excise officers.

1127. Throughout all the towns of Ireland?

Throughout all the towns of Ireland. Excise officers are in all the towns of Ireland, I believe, and it would be very easy to carry out through them a monthly or a three-monthly inspection to see that the provisions of the Act were obeyed.

1128. Ireland is an excitable country. What would the druggists say to that provision suddenly coming upon them?

I inquired in Dublin, where I had the only opportunity of making an inquiry, and the druggists told me that they would prefer being licensed, because they said it would serve their trade. One druggist in a principal street in Dublin said to me, "If you have any recommendation to make to your College, will you tell them to prevent Mr. So-and-so and Mr. So-and-so over the way, who are grocers, from selling Epsom salts, and selling oxalic acid and sublimate." I asked him, "Would you wish then to be licensed?" "Certainly," said he, "to prevent that competition."

1129. You think that throughout Ireland they would be satisfied to be put under the Excise in that way?

I can only speak of Dublin, but my impression is that they would. Of course in the country districts where there is only one shop, the shopman would not like to pay the expense of a licence; he would know that he could have no competition in a small town. But the annual expense might be very small.

1130. Then there must not only be the expense of the licence, but there must be the inspection occasionally?

Yes, by the Excise officer.

1131. *Chairman*.] Would you defray the expenses of that inspection by the fees taken for the licences?

I think there ought to be no additional expense; the Excise officers exist already. It would take but a very short time for them to go through the druggists' shops in their district.

1132. Lord *Talbot de Malahide*.] I suppose the police would be as competent to make that inspection as the Excise officers?

I prefer the Excise officers; the police are constantly being changed. The Excise officers are more permanent.

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1133. Duke of *Somerset.*] You have inspected the apothecaries' and druggists' shops, I think you said, in Dublin, on one side of the river?

On both sides. One side this year and the other last year.

1134. Do you ascertain the purity of the drugs according to your Pharmacopœia?

That is our chief object. We call for certain preparations to see whether they are pure. We ask to see the scales and weights to see that they are correct, and we just see that the shop is kept in a tolerably clean state. If the drugs are not pure, we have the power under our Act to burn them in front of the shop. I need scarcely tell your Lordships that we exercise that power.

1135. Do you believe that drugs throughout Ireland are sold in a state of purity, according to your Pharmacopœia?

Not always so. I was examined last year before the Committee of the House of Commons on the adulteration of drugs and medicines; I gave evidence there upon that head; but generally speaking, they are tolerably pure, and the Apothecaries' Hall of Ireland has been of great service in that respect.

1136. *Chairman.*] Are there any other statements which you wish to make which you think would be of use to us in the prosecution of this subject?

I think the following are the only observations which I have to make—namely, the shape of the bottles not quadrangular, but angular; the licensing of druggists; an inspection by Excise officers from time to time, so as to carry into effect the proposals in your Lordships' Bill; and only the principal of the establishment being allowed to sell poisons.

1137. Duke of *Somerset.*] I understood you to say that you agreed with the Bill in this respect, that you thought it desirable that the poisons should be kept separate in every shop where other drugs were sold?

Certainly; apart from all other drugs.

1138. We were told that the poisons would be continually taken down in making up medicines according to prescriptions, and that more danger than safety would arise from such a provision?

The rule in all respectable apothecaries' houses which I have seen is this, even with the youngest boys, that the person who makes up the prescription does not take down all the bottles from the shelf and put them on the counter before him, but he takes the measure which he is using, and goes to the shelf and fills the quantity from the bottle while at the shelf, and replaces the bottle immediately. I have seen myself in some of the houses in Dublin, presses under lock and key very excellently arranged, where no difficulty could possibly occur in the apprentice or assistant who was going to compound the medicine walking to the place where the press was kept, and turning the key, to fill out the quantity required into the measure. Therefore, I think that no practical inconvenience ought to occur. But I am quite sure that objections would be raised to anything which would increase trouble to the druggist or to the apothecary, and we have found that ourselves, especially in reference to those regulations which we have recommended in Ireland. The question, in my opinion, resolves itself into this, are we to have a free trade in poisons as in food?

1139. Lord *Talbot de Malahide.*] Of course you would not allow dangerous drugs to be kept in a grocer's shop mixed with other articles?

Certainly not; they should be very carefully kept apart.

1140. Marquess of *Salisbury.*] Supposing there was a strict law to prevent it, what system would you recommend to enforce such a law?

I have suggested the advantage of an Excise inspection, and in case of an offence being discovered, I would propose in the first instance a fine, for the second offence, perhaps, a double fine, and for the third offence the withdrawal of the licence.

1141. Would you give any remuneration to the Excise officer for such inspection?

Certainly not; I would make it a part of his duty.

The Witness is directed to withdraw.

ALFRED SWAINE TAYLOR, Esquire, M.D., F.R.S., is called in, and further examined as follows :

*A. S. Taylor, Esq.,
M.D., F.R.S.*

2d July 1857.

1142. *Chairman.*] HAVE you had the goodness to look at the list of poisons proposed in our Bill amended as proposed by you, and also the lists which are in force in Prussia and in France ?

Yes.

1143. Have you drawn up tables which would show us the result ?

Yes ; I have tables showing what I have called the reduced English list ; another column showing the Prussian list ; a third showing the substances in the English list which are not in the Prussian ; and a fourth showing the substances in the Prussian list which are not in the English ; so that your Lordships might see at a glance the different views adopted in different countries. I have done the same with respect to France, and I have also given the dates of the French and Prussian regulations.

1144. Will you state the reasons why you think it advisable to omit some of the poisons which are mentioned in the other two lists ?

I have struck out some, because I have heard so much objection made with regard to dispensing ; I have put down 13 articles, but there are two or three other poisons which I think ought not to be omitted ; they frequently come into dispensing in shops, and no doubt their being included in the list gives a great deal of trouble. If those who are connected with the dispensing trade could submit to the introduction of such substances as aconite and hemlock, I think it would be better. I have struck them out of the list ; that has been merely from consulting their convenience, not from any opinion of my own that they ought to be omitted. I have endeavoured to think of what would be the very shortest list which could be taken for public safety.

1145. Marquess of *Salisbury.*] Is aconite very frequently used as a medicine ?

Yes, it is coming very much into medical use. Your Lordships will see that there are some peculiarities in the lists of different countries ; for instance, in the English list we place (and I think all will agree in the propriety of it) the essential oil of bitter almonds ; this does not occur in the French list, but it does in the Prussian. Then we have oxalic acid and salt of sorrel, nux vomica, and cocculus indicus. These are poisons of which we have had experience in England, and the sale of which ought, as it appears to me, to be restricted.

1146. *Chairman.*] With regard to the essential oil of bitter almonds, is not there some way of preparing it which renders it innocuous ?

The process does not render it perfectly innocuous. There is a mode of separating the prussic acid from it, but still it is a poisonous substance, and it would be impossible, except by a chemical analysis, to distinguish the safe from the dangerous preparation ; as it is only used for giving a scent to soap, for perfumery of various kinds, and for flavouring confectionery, I think that, not being used as a medicine, it is a fit subject for restriction. It can never be wanted upon any emergency.

1147. Duke of *Somerset.*] It is never used in medicine ?

No, it is too unsafe ; the proportion of prussic acid in it varies from about 3 to 12 per cent. ; consequently there would be no possibility of judging of the dose, so that it is not used in this country.

1148. In the French list phosphorus is included ?

Yes.

1149. How is that restriction applied ; does it mean that phosphorus matches may not be sold, or what ?

No ; I think it applies simply to phosphorus either in the pure state, or made up into a paste, as it has been frequently made for the purpose of destroying vermin. I do not think it applies to lucifer matches.

1150. In this country is it not used for destroying vermin ?

Yes.

1151. *Chairman.*] Will you add to the 13 articles which you have recommended those three which you think ought to be included, but which you have excluded, merely with a view not to interfere with dispensing ?

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R 3

Yes.

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Yes. It happens with regard to hemlock that there are many pills in the different Pharmacopœias of the three countries containing small quantities of hemlock, with opium and other substances. The result of putting in hemlock generally, therefore, creates a difficulty, because unless it be specified as hemlock leaves, or hemlock tincture, or something very defined, it leaves it open to the dispenser to say that it is stopping his business, because he has to take a compound of hemlock and make a pill, and he has constantly to go to a locked-up place for it. That is not intended.

The Witness delivers in the following Papers :

RESTRICTIONS ON SALE OF POISONS.

13 ARTICLES. Reduced English List.	17 ARTICLES. Prussian List, Royal Ordinance, Oct. 24, 1855; Oct. 8, 1856.	7 ARTICLES. Substances in English List, and not in the Prussian.	7 ARTICLES. Substances in the Prussian List, and not in the English.
Arsenic and its Compounds. Corrosive Sublimate and its Solution. Poisonous Vegetable Alkaloids. Prussic Acid. Cyanide of Potassium. Essential Oil of Bitter Almonds. Cantharides. Opium in Tincture, Extract or Powder. Chloroform. Oxalic Acid and Salt of Sorrel. Nux Vomica. Tartarized Antimony and its Solution. Cocculus Indicus.	Arsenic. White Arsenic. Rat and Vermin Powder. Yellow Sulphuret or Orpiment. Arsenic, in all its different forms and combinations, and all colours containing Arsenic. Corrosive Sublimate. White Precipitate. Red Precipitate. Yellow and Red Iodide of Mercury. Prussic Acid. Oil Bitter Almonds. Cyanides of Potassium and Zinc. Euphorbium. White Hellebore. Strychnia. Veratria. Nicotina.	Cantharides. Opium in Tincture, Extract or Powder. Chloroform. Oxalic Acid and Salt of Sorrel. Nux Vomica. Tartarized Antimony and its Solution. Cocculus Indicus.	White Precipitate of Mercury. Red Precipitate. Yellow and Red Iodides of Mercury. Cyanide of Zinc. Euphorbium. White Hellebore.
		(signed)	ALFRED S. TAYLOR.

RESTRICTIONS ON SALE OF POISONS.

13 ARTICLES. Reduced English List.	19 ARTICLES. French List, by Decree, 8 July 1850.	4 ARTICLES. Substances in English List, and not in the French.	10 ARTICLES. Substances in the French List, and not in the English.
Arsenic and its Compounds. Corrosive Sublimate and its Solution. Poisonous Vegetable Alkaloids and their Salts. Prussic Acid. Cyanide of Potassium. Essential Oil Bitter Almonds. Cantharides. Opium, in Tincture, Extract, or Powder. Chloroform. Oxalic Acid and Salt of Sorrel. Nux Vomica. Tartarized Antimony and its Solution. Cocculus Indicus.	Arsenic and its Preparations. Corrosive Sublimate. Poisonous Vegetable Alkaloids and their Salts. Prussic Acid. Cyanide of Potassium. Cantharides, the Insect, Powder or Extract. Opium and its Extract. Chloroform. Tartarized Antimony. Belladonna, Extract and Tincture. Hemlock, Extract and Tincture. Cyanide of Mercury. Foxglove, Extract & Tincture. Henbane, Extract & Tincture. Nicotianine (Volatile Oil of Tobacco). Nitrate of Mercury. Phosphorus. Ergot of Rye. Stramonium, Extract and Tincture.	Essential Oil Bitter Almonds. Oxalic Acid and Salt of Sorrel. Nux Vomica. Cocculus Indicus.	Belladonna, Extract and Tincture. Hemlock, Extract and Tincture. Cyanide of Mercury. Foxglove, Extract and Tincture. Henbane, Extract and Tincture. Nicotianine (Volatile Oil of Tobacco). Nitrate of Mercury. Phosphorus. Ergot of Rye. Stramonium, Extract and Tincture.
Proposed to be Added : Aconite. Hemlock. Phosphorus Paste.			ALFRED S. TAYLOR.

1152. *Chairman.*] Will you state what the paper is which you have in your hand? *A. S. Taylor, Esq.,
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I have looked with some care to see what amount of trouble would be given to druggists and dispensers as to the number of articles required to be shut up in a shop, or kept apart, and I find the taking the list which I have given, before making the additions which I have just made, the number of articles in bottles would be about 22. This is a list of them :

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The Witness delivers in the same, which is as follows :

Arsenic, white, yellow, or green.	1 Cantharides.
Fowler's Solution.	3 Opium.
Donovan's Solution.	1 Chloroform.
4 Liq. Arsen. Muriatis.	2 Oxalic Acid. Salt of Sorrel.
2 Corrosive Sub. and Solution.	2 Nux Vomica.
1 Prussic Acid.	2 Tartarised Antimony and Solution.
1 Cyanide of Potassium.	1 Coccus Indicis.
Essential Oil of Almonds.	
2 Almond Flavor.	22

With regard to arsenic, I think that all preparations of arsenic ought to be kept secluded from others. I have heard Dr. Neligan's evidence this afternoon, and I can quite corroborate some parts of it, that in well-regulated shops it is never the practice to place these dangerous bottles or to leave them on the counter. It is quite a mistake where that is imputed, and that arsenic and opium are found standing together on a counter. Druggists would be always, of course, putting the wrong medicine into the wrong bottle if that were the case. But the rule in a good shop is to go to the place where the bottle is kept, which is generally a separate part, to take down the bottle, and to measure off the quantity from it. I know shops where a laudanum bottle and an arsenic bottle are never allowed to be on the counter. The same principle might apply to a separate part of the shop set apart for these articles; there is no necessity for taking them out of their places. With regard to several of these substances, they hardly come under medical dispensing; for instance, oxalic acid and the salt of sorrel. Oxalic acid is chiefly bought for the purpose of cleaning straw, silk, leather, and articles of that kind; it is not used in medicine.

1153. *Duke of Somerset.*] Is oxalic acid one of the 13?

Yes; I have included under that, oxalic acid and salt of sorrel, because it is very nearly the same thing; I feel that the great difficulty in this list is opium, that is to say, laudanum; that is undoubtedly a difficulty. It is frequently required; but still the accidents which occur from its misuse are so numerous that I feel satisfied that unless some restriction were placed both on its being dispensed, and on the mode of keeping it in the shop, we should still have a number of deaths yearly from it.

1154. Might not it be allowed to be sold, as was suggested, in small quantities?

Yes, it might; the observation which I was making was in reference to the trouble imposed on dispensers in keeping it separate from other articles; at the same time, I would not deal with a shop, or send a prescription to one, where I knew that they were not in the habit of keeping these things separate.

1155. *Lord Talbot de Malahide.*] I see that a suggestion is made in a communication to the "Medical Times" with reference to laudanum: "The public justly complains that a sufferer from a sudden attack of tooth-ache or neuralgia, being unprovided with proper certificates, is obliged to grin and bear it from the want of laudanum. Might not these difficulties be removed without interfering with the object in view, by permitting all qualified chemists to administer a single dose, not exceeding a certain quantity, provided it were swallowed in their presence"?

Yes; I suggested, the last time I was here, that that would be one way of getting over the difficulty, but it would not meet the case of one person being sent for laudanum for another person, who could not get it for himself; still I think it would, in some measure, remove the difficulty.

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1156. Would there be any objection in a great many cases to insisting upon the party coming to the shop for the laudanum himself?

I think not; he might be too ill to come himself, but in that case he would require a medical practitioner to prescribe it, and that would remove the difficulty. I really think that most of these difficulties appear to have been constructed; I think that the restrictions, when once passed, would settle down into something like the quiet which we desire. With regard to the Prussian regulations, which are much more severe than any proposed by this Bill, a Prussian physician states, that in 15 years' practice in his official situation in one of the most populous districts of the State, only one instance of poisoning, which was accidental, took place among the inhabitants. I think that what has been done in France and Prussia, may safely be done in this country, and the lists which I have placed before your Lordships are certainly much more limited than those which these Governments insist upon.

1157. Marquess of *Salisbury*.] Are the regulations in Prussia strictly acted up to?

I believe they are. I have not been in Prussia lately to see that myself, but I take in a Prussian journal on Toxicology, and I also take in the French journals, having given my attention almost exclusively to the subject of poisoning. Where there is one case that occurs in Prussia, I think I may safely say there are 10 which occur in England. Taking the case of poisoning by strychnia, I do not believe that the Prussian and French journals have many instances of that kind; I find only one instance in about 18 years of poisoning by strychnine; and with regard to arsenic, poisoning by arsenic has been considerably reduced since the French regulations came in; at least, I judge so, because, taking in these journals, I do not see the cases of poisoning recorded which there used to be.

1158. Duke of *Somerset*.] How are some of these articles procured by the druggists in the first instance, for example, such an article as hemlock?

They are generally supplied by herbalists, people who gather them; and there are persons in Covent-garden called medical herbalists, who supply by wholesale the tinctures, the extracts, and other substances.

1159. Persons who wanted to get these articles for a bad purpose, might get them from the herbalists?

Yes; and that is a point which I think ought to be considered, whether herbalists ought not to be included with druggists where they deal in any particular poisons.

1160. *Chairman*.] Would they not be dealt with by this Bill either in its present shape or in the shape proposed, of requiring licences from those who sell poisons?

I see no difficulty in it at all; I think they might be included, and I should like to state an instance to your Lordships showing the importance of it. The clause says, "No person shall sell any poison;" it does not define the person.

1161. Duke of *Somerset*.] Supposing an apothecary wants to obtain from a herbalist, as usual, the hemlock which he has been in the habit of obtaining, will he have to go with a witness, and go through this form to the herbalist, before he can get it from the herbalist?

I should think not, under this Bill.

1162. *Chairman*.] The 11th clause would obviate that, would it not?

He might merely write for it himself; he might put down "hemlock," as much as he required.

1163. Duke of *Somerset*.] Then you would exempt the apothecary from the action of the Bill?

I would; I think that medical men must be exempted in all cases; and I think the public have quite sufficient security as to them when they have been examined, and know the properties of drugs. The apothecary is one who must have been examined; the druggist is not necessarily so. I was about to mention a curious instance with regard to belladonna. A gentleman living in Portland-place was attended by a physician, and he ordered an infusion of ash leaves; the leaves of the ash tree; a servant went down to Covent-garden to obtain these leaves; the infusion

infusion was made in the usual way ; it was administered to this gentleman ; he took it, and was seized with very severe symptoms, which lasted for more than 24 hours ; in fact, they thought that he was dying ; he was in a state of narcotism and convulsions. The physician was sent for ; seeing the condition in which this gentleman was, he asked to look at the jug in which the infusion had been made ; he thought there was nothing wrong about it, and he drank about a wine-glass of it himself. Another physician was in the room with him at the time, and after a short time he said, " I must sit down ; I feel very unwell." The result was, that he went off into a complete stupor, and became most seriously ill ; and it was not until he had recovered, and examined the jug, that he found that, instead of selling the ash leaves, they had actually sold belladonna, and this gentleman and the physician had had a narrow escape. There are people who deal in these drugs in shops who do not know one from the other ; they would not know hemlock from parsley.

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1164. Many of these herbalists are very poor people ?

Yes ; the articles might be collected, and put into the hands of a person properly qualified to sell them ; but it is a most dangerous thing to allow persons to deal with these powerful articles, who may sell one for the other.

1165. Marquess of *Salisbury*.] Are not those who collect them for the herbalist a still lower class ?

Yes. There is one safety which we have with respect to them, that they do not know how to use them. With respect to hemlock and other materials, there are circumstances in their very nature, their substance, their form, their taste, their smell, which would place a person on his guard, and prevent accidental poisoning ; that is one great point with respect to them.

1166. *Chairman*.] You made some remarks on the 5th section on the last day of your examination ; have you at all considered any mode of carrying out those views ?

Yes ; I propose to say, in order to obviate the difficulty of constantly procuring a certificate for each separate quantity of medicine or poison required, that " such certificate may, if required, be retained by the purchaser, after a copy thereof has been made by the vendor, and the said certificate shall be available for the purchase of the same poison for a period of six months from the date at which it was first issued, provided that each purchase of poison be entered in writing on such certificate by the vendor at the time of sale."

1167. Duke of *Somerset*.] Will you explain what you mean by that ; do you mean that he may buy the same article from the same man, or that, having bought the article, and having got the signature, he may buy the same article from another man ?

The proposition is, that, supposing a person requires opium or prussic acid, as a medicine, it would be an undesirable thing for him to be always procuring a certificate ; he might continue to get the medicine not of the same man, but at different shops, by each vendor endorsing the certificate as so much sold at such a date, and taking a record of it in his book.

1168. For instance, if a person set out from London with a paper of this kind, and travelled down to York, and wanted a little more opium there, he might produce that certificate, and get his opium at once ?

That would rather go against the provision of the Act, which says that the person must be known. Supposing a person is living in London who is in the habit of using opium or prussic acid as a remedy, and he complains of being put under severe restrictions by this Act, I mean that so long as he resides in that locality, and requires this medicine, he may have the power of using the same certificate, provided that it is each time endorsed, not that he should go constantly to the same chemist, but to some chemist in the same district where he is living. I may not have expressed that technically, but that is the meaning of it, that he should go to some one who would know the party from whom he had the certificate. It was suggested to me by a friend who told me that he was in the habit of taking prussic acid, and he said, " Now, is it to be the law that I am not to get my usual quantum of prussic acid without constantly going to some medical man to give me an order for it ?" It struck me that some provision of this kind might probably meet this difficulty, if your Lordships considered it such, that the same certificate might be used. I presume in that case it would

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be for a person who only bought in small quantities, and where it was really intended for medicinal use.

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1169. Lord *Somerhill*.] Do you see much inconvenience in that certificate being in general use throughout the kingdom, wherever a man might go?

Yes; I am afraid that it would have this evil effect: supposing a person only required 10 drops of prussic acid, he might go from London to York, and he might get his 10 drops at a great number of shops; it would only be the conscientiousness of the dealer seeing the number of indorsements of so many 10 drops at such dates which might induce him to refuse to supply it.

1170. But would not there be a responsibility upon the man who did not refuse it, seeing that to-day, on the 2d of July, the party had already obtained it at three shops, and was then applying for it at a fourth?

Undoubtedly.

1171. It appears to me that the check would be as great in the case of a man travelling in the country as in the same parish?

That is a matter of opinion for your Lordships to consider; but undoubtedly requiring an indorsement on the original certificate would be a very important check, because it could be soon found whether the poison was required for medicine or for criminal purposes. There is another suggestion which I would make with regard to the 5th section—namely, that on no account should the poisonous vegetable alkaloids, or their salts, be sold except under the prescription or order of a medical practitioner.

1172. *Chairman*.] Are those vegetable alkaloids used in any manufactures?

They are not used in any manufactures. They are not specified in the Bill, and it would be a very dangerous thing I think to specify them. All persons who are acquainted with chemistry and pharmacy know what they are. They are not required in any manufactures, and I would further observe, that they are not required for any domestic purpose in which a person not a professional person could with safety to himself or others use them.

1173. Duke of *Somerset*.] It has been suggested that this Bill, if it became a law, would be attended with very great inconvenience to all students of chemistry, or those who are engaged in making experiments, and studying the nature of substances, because they require to obtain their articles in a pure state; whereas according to that Act they could only have them mixed and coloured?

If we read over the list I think your Lordship will find that it is not so. I will begin with arsenic; that is not required.

1174. It is not required for what?

Your Lordship mentions students of chemistry.

1175. I am speaking of persons who are making scientific experiments; making themselves acquainted with the nature of a variety of simple substances, and who want these articles?

Then they might, upon the prescription of a medical practitioner, or even through their teacher in any medical school, obtain what they wanted in that respect.

1176. Is there such a provision in the Act that they could obtain it in a pure state?

Yes. The 8th section contains the words “save where such poison is stated in the certificate to be required for some lawful purpose, for which such admixture would, according to the representation of the person giving the certificate, render it unfit.”

1177. And in that case such poison may be sold without such admixture in quantities of not less than half a pound?

I have suggested that that should be struck out; I do not see the use of it at all; in fact they should obtain it in any quantity. But I would observe that if a person knows anything of chemistry, if he is only a tyro at chemistry, he can separate the colour. That is merely a protection for the public who are ignorant of these things, and who desire to make a misuse of them; but a chemist can separate the colours. Oxide of manganese has been suggested for admixture with arsenic, as being of the same specific gravity as arsenic. Now, manganese is black, but it is a fixed body, while arsenic is a volatile one; so that if the powder were

were put in the flask and heated, all the arsenic would escape, and the manganese would be left behind. But I must advise your Lordships against the use of manganese, for the following reasons: it is a metal which if it is used with arsenic may be found in the stomach, and seriously interfere sometimes with the detection of poison. Where a quantity of arsenic is small, the presence of manganese may seriously affect the analysis. I do not see that there is any compensating good; therefore I should prefer putting in indigo, because it is perfectly innocuous; a person may take it in any quantity, while manganese is a little irritating.

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1178. *Chairman.*] With regard to the 12th clause, have you considered that at all?

Yes. I should like to read to your Lordships a case which was communicated to me, and which in fact was given in evidence at the trial of Palmer, which I think would show strongly the importance of keeping poisons separate from medicines in shops; it was the case of Mrs. Sergison Smyth; it occurred at Romsey, in Hampshire. It seems that some draughts were ordered to be prepared, and Mr. Jones, the druggist, says, "After I had put up the draughts, and they were wrapt up, she" (the servant) "said, 'I think Mrs. Smyth wants some of the medicine that she had last; at all events, I will take one bottle.' I said, 'Very well; I will make it up directly;' she said, 'Let it be as quick as you can.' I told my apprentice to get the prescription book that I might see the prescription; I saw it contained *salicine*." That is a substance something like quinine, extracted from the bark of the willow, a very wholesome tonic. I wish your Lordships to observe that this is the druggist himself who is saying this. "I said to my apprentice, 'You had better go to Mr. Taylor's (a surgeon) and get me a little more, as I do not think I have sufficient;' he said, 'I do not think they have any more;' I said, 'What I have I suppose will be enough for a single quantity; perhaps you will take that, Caroline;' she said, 'Oh, yes, that will do very well.' I then got a four-ounce bottle from the place where they are kept, and went up some steps to get the *salicine*, which is kept on an upper shelf; the shelf is at one corner of the shop, where I keep things not often used; I reached down, as I thought, the *salicine*, and weighed out nine grains of it, and put it on some pink paper to put into the bottle; it appeared whiter on pink paper; I told my apprentice to write a label; then in that state he put on merely 'The mixture as before,' and he gave it to his young man to tie up as he was obliged to leave the shop. When the mixture was nearly finished, the servant said she would call again for it in a few minutes; it was beginning to get dusk. I had the gas lit immediately after making up the medicine. When I returned, the young man had wrapped up the medicine, and I wrote the name of Mrs. S. Smyth on the outside. The servant soon afterwards returned, and took the medicine away with her. The following morning I went into the shop as usual. My young man said, 'Did you see a horse gallop into town with Captain Smyth's servant this morning?' He said he saw Mr. Taylor (the surgeon) go off directly afterwards. I said, 'I hope Mrs. Smyth is not worse,' and turned round towards my desk. I then saw the bottle I had used the previous night. I took it up, and saw that it was labelled '*Strychnine*.' I said, 'Oh, my God, I have given this in mistake to Mrs. Smyth.'" That lady died in an hour and a half; she took about three grains. This druggist was tried for manslaughter at the Winchester assizes. I believe there was some ground of exculpation with regard to its being a chance medley, but the druggist afterwards destroyed himself in a fit of insanity. He kept the *salicine* and the *strychnia* close together in the same part of the shop; and I believe it is a very frequent practice that things *not often used* are put together, whether they are innocent or injurious. I myself had to give evidence in a case on a trial for murder, in which a child had been killed by three grains of arsenic being given to it, weighed out in mistake for calomel. It was ascertained that the arsenic bottle was kept on a shelf immediately above that on which the calomel was kept. The stomach was examined. Arsenic was found there, and no calomel; and there was no doubt that three grains had been weighed out in mistake. I might mention many other instances where accidents have occurred from this want of caution in keeping poisons and medicines separate.

1179. In consequence of that, you would recommend this addition to the 12th clause, "That no person under the age of 18 years, who has not been two years engaged in the practice of pharmacy, and in the art of dispensing, or who has not undergone examination either by the Apothecaries' Society or the Pharmaceutical

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Society, shall be allowed to sell or dispense any poisons; a penalty for the infringement of this rule to be levied upon the druggist employing the unqualified or incompetent assistant?

I throw that out as a suggestion for consideration. I believe that many accidental deaths arise from those who serve these things.

1180. On the subject of green paper in a room, have you any suggestion to make?

I doubt whether it can be included in an Act of Parliament.

1181. Do you not think it important to give great publicity to the fact of the poisonous character of such paper?

Yes, to let the danger be well known.

1182. Duke of *Somerset*.] The instance which you gave us the other day, I think, was that of a person at Birmingham who found himself ill, and who went to the sea-side and found himself better?

Yes; he was recommended to go by a medical man; before he went, the symptoms had some of the special characters of poisoning by arsenic.

1183. You said also that his room was lighted by gas, I think?

I think he burnt gas in the room.

1184. Do you think that the gas at all affected him?

I think not; I do not think the gas would have produced the symptoms under which he was labouring.

1185. Do you think that the gas was the cause of bringing out any portion of the poison in the paper?

It is very difficult to say how the material does get diffused in a room, whether by currents of air, or what it can be; I asked a very distinguished Prussian chemist who was over here lately respecting that (for I see that these arsenical papers are strictly prohibited in the kingdom of Prussia), and he told me that he thought it was from the mechanical diffusion of the loose dust where the powder was put on the paper in a very loose way. He said that he had noticed it on a microscope glass which had been kept for some time in a room where there was a flock paper; that he had seen particles of flock which were not visible to the naked eye, but which were plainly visible under the power of the microscope. I should like to furnish your Lordships with the particular case to which I referred (it is published), so that you might judge for yourselves; I will do so with pleasure; it was published about four or five weeks since. The paper was sent to me for analysis by the editor of the journal who published the case.

1186. *Chairman*.] Have any cases come under your knowledge of women being taken ill from wearing light green gowns?

No. I think it is not unlikely that there may be really many cases of illness due to some cause of this kind which has been hitherto unsuspected, but in which the symptoms have been referred to other causes. I doubt whether the arsenical green is used much in dyeing stuffs.

1187. Duke of *Somerset*.] Do you believe that they use it for dyeing stuffs?

I do not believe they do. I have found it in some of the ornaments which ladies wear in their hair; in those painted articles which look like rose buds. But with regard to its being used for dyeing either woollen or silk, or other fibres, I have no knowledge at all that it is; and I should think that it would hardly be employed.

1188. You tested this paper, you say, and you found so much arsenic in it?

Yes.

1189. Do you think that if you hung up the paper, and tested it after it had been hung up some time, you would then find less arsenic?

That is a question the answer to which would be very speculative. If I took a square inch of that paper, and found out how much copper it would cover, which would be one mode of determining the quantity, say that it would cover four square inches of copper, I think it very possible that there might be more arsenic when the paper was quite fresh than after it had been up some time. If you rub your hand over such paper rather roughly, some of that green material very easily comes off, and that, in time, may be the result; you may have those vapours about the

the room. It would be very difficult to give a quantitative analysis, for this reason, the paper may not be all equally covered with arsenic; one part may have a little more of the material than another. It is not a new matter, for in my book on poisons, which was published in 1847, I called attention to the subject, and then it was well known in Germany.

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1190. Marquess of *Salisbury*.] Was there not an idea, some time ago, that particular candles emitted arsenic?

Arsenic was used in the manufacture of candles.

1191. Is it supposed ever to have an injurious effect?

Decidedly; vapour of the arsenic is evolved in the burning of the candle; it comes off in a kind of smoke.

1192. Are there any other poisons in colours likely to have an effect in a similar degree?

There is a kind of orange yellow containing arsenic. It is very much used in colouring the ornaments to twelfth cakes, and very frequently causes death in that way. The children eat the coloured sweetmeat, and they have all the symptoms of poisoning by arsenic, and die.

1193. Is not vermilion also used for a red colour?

Yes, but that is not a powerful poison.

1194. *Chairman*.] A gentleman who was examined alluded to the practice of dispensaries requiring the poor to bring their own vessel for the receipt of the drugs?

Yes.

1195. The first witness who mentioned that fact gave it as a reason why it would be impossible to restrict the sale of poisons to particularly shaped or coloured bottles, that those bottles would be used again, and that in process of time they would come to lose their distinctive characters in the minds of those who possessed them?

I do not think that either a good or satisfactory objection, but, on the contrary, I think that the present system of the poor bringing their own bottles, any kind of bottles, cups or saucers, or any kind of vessel, for receiving medicine, is a most improper and a most dangerous one; I know nothing more dangerous. One instance which occurred to my mind after leaving your Lordships' Committee on the last occasion, was a case in which I had to give evidence against a woman who was tried for the wilful murder of her child in Essex, and it is partly connected with this very question. The child had died from laudanum; the phial, which was a one-and-a-half ounce phial, was sent to me for an analysis of the contents, and I found in it opium and soap liniment. The woman said that she had had the bottle with drops containing iron, a solution of iron in alcohol; and it was proved by reference to the books of a dispensary that that had been served to her. But there is this evil practice, of the poor constantly using the same bottle for outside and inside applications. The iron-drops must have been exhausted, and the bottle must have been used by some neighbour or friend (for she had not seen it for a long time) for putting in opium liniment, which is never given internally; she not knowing that there was any harm in it, gave some to her child, and I believe killed it, without the intention of doing so. Fortunately for her, I was able to establish most clearly that iron had been in the bottle, because in pouring the iron liquid from the bottle, a little had gone over the label; and I found the iron still there, although no iron was in it when the bottle was brought to me. I mention this case to show that it is a fact, that the poor will put into a bottle without rinsing it, which has had perhaps corrosive sublimate, a medicine intended to be taken internally. It is altogether a bad practice, and it is really no objection which should be made to the practice of having one coloured or shaped bottle for outside use, and another for inside.

1196. Would the difference of expense be very great in providing new bottles?

I am assured that it would not. I mentioned the matter not long ago at a large glass manufactory in the north, and they assured me that if only the demand came up, the shape and blue colour would occasion no additional charge. In the better class of druggists' shops they use very white glass for medicines; that is much more costly in proportion than using green coloured glass of an angular shape.

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1197. Duke of *Somerset*.] I suppose you would give some time before you would make it compulsory to use a particular kind of bottle throughout the country?

I think the order would very soon be filled up. Those manufacturers in the north told me that they could work off any number of bottles of any shape or colour within a very short time: of course it would require a little time for all the country to be supplied.

1198. Lord *Somerhill*.] Practically, are you of opinion that in a year and a half, or two years, the whole country would really know the colour as well as the shape of the bottle?

Yes; I think it is very much the same as with regard to soda-water bottles; everybody knows what a soda-water bottle is. It is like the case of blacking bottles or ginger-beer bottles; almost every one knows by the shape what they are intended for, and I think we should very soon find the public associating in their minds the idea whether a medicine was for outside or inside application, by the shape of the bottle as well as by the colour. To me it appears a most wise and excellent precaution.

1199. Do you not think that the regulation as to colour might be extended to the paper wrapper also?

It might. I see no objection to it. I would say that the mistakes which occur through mixtures and draughts being put into similar bottles affect the lives of the middle classes, and I may say to a very great extent. The lives of the poorer classes to a very great extent are affected by their own carelessness with regard to putting different substances in the same vessels, and I think it a very hard case upon them that dispensaries and hospitals do not supply bottles as well as medicines. I have seen in hospitals this plan adopted, that a poor woman would bring a quart wine-bottle for a few ounces of a mixture; that no label would be put to it, but something simply written on a ticket, and stuck into the cork by a pin. Accident may cause that to be lost; and if that mixture is for a wash or a lotion, it may be taken by mistake for another medicine supplied in another bottle to be taken internally.

1200. Would you extend any regulation to be introduced for ordinary medicines to horse medicines and medicines for cattle generally?

I would, if they contained any one of the articles mentioned. I would be guided entirely by the schedule which was adopted.

1201. Duke of *Somerset*.] You have heard the evidence given here to-day respecting Ireland, that the Acts which have been passed have been in many cases a dead letter, because it was no one's interest to enforce the Act. With regard to this Act, and the penalty for offending against it, in the 13th clause, do you think that this Act, merely with this penalty, would be sufficient, or that it would be necessary to take some further step, and to make some further provision to secure the enforcing of the Act?

It would be necessary to make some further provision.

1202. Having given so much attention to the subject of poison, have you considered what provision might be adopted in this country with most convenience, and which would be effective for the purpose?

That is very much of a technical and legal question; but I feel, with regard to this Bill and the Arsenic Act, and other Acts of a similar kind, that if there is no public prosecutor to enforce the law, however excellent the provisions, the remedy becomes inoperative. I would only suggest, that if there were any medical officers appointed for different districts, or a Board of Examiners, which has been talked of, under their directions prosecutions might be carried on if necessary; but I know of no machinery by which the law can be enforced.

1203. If we merely passed this Act as it is, and took no further step to enforce it, do you think that it would have full effect?

It would be a very invidious thing for a private individual to take it up; I do not see that any benefit would be done. I am afraid that with it, as with regard to the Smoke and Nuisances Act, there would be a difficulty, without an order from the Secretary of State, or some special order for a prosecution to be instituted.

1204. Lord *Talbot de Malahide*.] Private individuals would not like to incur the expense of a prosecution? A. S. Taylor, Esq.,
M.D., F.R.S.

And they would not like the invidious position of appearing as informers or prosecutors; and if your Lordships were to put in a clause that one-half of the penalty should go to the informer, it would have a bad effect, for it would raise up a class of men who would merely look to the technicalities of the matter, and who would annoy the chemists.

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1205. They would be annoying the chemists, or getting money out of them?

Yes. I see that the fine in France is much heavier than that proposed in this Bill; it is 500 francs, and 3,000 francs, that is about 20*l.* and 120*l.*; that is a very heavy fine. I have reports of a great many cases where persons have been thus fined in France for violating the provisions of the law. They appear originally to have taken place in this way: the persons connected with the police of the district have given information to the magistrate, and the party has been had up before a person who would correspond to our police magistrate. The question is whether in this country the police would be the proper body for enforcing the Act.

1206. I see that the French prohibit the use of arsenic for steeping grain, embalming bodies, and preserving specimens of natural history?

Yes; they are very strict about arsenic, and there are other substances which may be used equally well.

1207. *Chairman*.] Have you any other point to bring before us?

I have no other; but I quite agree in what the Duke of Somerset has suggested, that the Bill will really be without any practical operation unless some person is nominated, or some class of persons are nominated, to superintend prosecutions for violations of the Act.

1208. How would you obviate that objection; have you considered the point?

That is more a legal than a medical question. We have no public prosecutor, or I should say it ought to fall more properly on a public prosecutor to institute those proceedings; it affects public health and public safety.

1209. Marquess of *Salisbury*.] Would any advantage be derived from the employment of Excise officers, as has been suggested by the last witness?

The Excise officers in this country are a very different class, I suspect, from those in Ireland. I do not think that they would be the parties to know about the preservation of drugs, or the keeping of drugs; I think there would be a difficulty about that. The higher class of policemen would be the men, if they could be trusted with the power to institute proceedings; then there would be this difficulty, there ought to be some supervision over druggists' shops, either by the College of Physicians, or some active supervision from the Apothecaries or Pharmaceutical Society, so that shops might be periodically visited, and that the state of the shops might be seen as to the bottles, and the labelling of them, and the keeping of the medicines apart from the poisons, in fact, to see that these rules were observed.

1210. Lord *Talbot de Malahide*.] There is at present a power on the part of the College of Physicians to visit the druggists' shops?

Yes.

1211. But it is almost a dead letter?

Yes; they just make one or two visits in a year, and look over a few drugs.

1212. And they have the power of destroying drugs?

Yes, if they are found to be bad. I have marked in the Bill which I have given to your Lordships all the points which I would suggest for your consideration; I think that as the list stands in the schedule which I have given to your Lordships, there really cannot be any fair ground of objection by reason of giving trouble in dispensing, while there would be, I think, a great protection of life by the observance of it. I have endeavoured to come to some estimate of the number of cases which I have seen; I think I have had in the last 26 years certainly more than 100 cases of deaths from arsenic alone.

1213. *Chairman*.] And how many from laudanum?

Not so many deaths from laudanum; they are mostly among children. When they are brought to the hospital they are treated, and the greater number recover;

A. S. Taylor, Esq., five out of six probably recover of those who are brought early to the hospital.
M.D., F.R.S. The other poisons have been chiefly oxalic acid, corrosive sublimate, prussic acid,
2d July 1857. and chloride of zinc.

1214. Lord *Somerhill.*] What proportion of the deaths to which you allude were from accident?

It is very difficult to give an estimate of that; I gave some statistics at our last meeting which throw a little light upon the subject. There are no regular statistics of deaths from poison—of individual poisonings.

1215. I understood you to say that you had had about 100 fatal cases from arsenic; how many do you suppose of those were criminal cases?

I am referred to mostly in criminal cases, so that that would be hardly a fair estimation, since they are referred to me from all parts of this country; I should think that the greater portion of the cases which I have had have been criminal cases; perhaps 60 have been criminal cases out of the 100 of which I am now speaking; then that is because they have been cases of some difficulty, and they have been brought to me from all parts for analysis. But with regard to accidental poisoning from arsenic, speaking as nearly as I can from reading and information, I should think that there was not one criminal case to above 10 or 12 accidental.

1216. That is your opinion generally of the cases throughout the kingdom?
Yes, taking them altogether.

The Witness is directed to withdraw.

Ordered, That this Committee be adjourned.

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Evidence in support of the use of angular bottles for containing all poisons supplied to the public; few exceptions necessary to this rule, *Neligan* 1088-1100—In the case of medical prescriptions comprising poisonous substances round bottles should be used, *ib.* 1094. 1096—Dissent from the opinion that peculiarly shaped bottles would be a false security, *ib.* 1095—The Schedule in the Bill should be extended as regards the poisons to be kept or sold in angular bottles, *ib.* 1098, 1099.

Further evidence relative to and in approval of the use of peculiarly shaped and coloured bottles, respectively, for external and internal applications, *Taylor* 1194-1200—The bottles would soon be generally adopted without difficulty, *ib.* 1197, 1198.

See also *Dispensaries*. *Maclagan, Dr.*

Brande, William Thomas. (Analysis of his Evidence.)—Has for many years been professor of chemistry at the Royal Institution; also professor of chemistry to the Apothecaries Company, 660—Has paid much attention to the subject of poisons, and has seen the Bill under consideration, 661-663—Explanation and approval of the practice at Apothecaries Hall in supplying poisons; circumstances under which supplies are sometimes refused, 665-669. 697. 713-719—Absence of inconvenience at Apothecaries Hall in the principal poisons being kept separate from other medicines, 667, 668.

Approval of the requirement of a certificate in all cases of purchase of poisons by individuals, 669, 670—The sale of poisons indiscriminately by miscellaneous shops in small country towns and villages is a great evil; these shops should be prevented from selling, 670-679—No poisons should be sold save by properly qualified persons who had proved their competency on examination, 679 *et seq.*—Consideration of obstacles to the practicability of requiring all vendors of poisons to pass an examination; suggestions hereon, 681-695.

Difficulty of defining by Act of Parliament the several poisons to be restricted, 697—Less stringent regulations necessary if the vendors be properly educated and qualified, 699—Approval of poisons being kept by druggists in peculiarly shaped or coloured bottles; this regulation should not apply after the poisons have left the shop, 700-704—Obstacles to a separate poison closet which should contain all poisonous substances, 705, 706—The main point to be urged is the qualification of the vendor, 707-710—Impracticability of restricting by law the sale of all poisonous substances, such as phosphorus, &c., or of quack medicines, 710-715.

The vendor should be empowered to refuse, arbitrarily, to sell poison to any one not known to him, or whose motives he may suspect, 720—Advantage of an entire prohibition of the sale of arsenic; less dangerous substitutes available, 720-725—Impracticability, by any regulations, of preventing suicidal or criminal poisoning, 726—Advantage of labelling each poisonous substance with the word "poison," *ib.*—Doubt as to a colouring of all poisons being of much use, 727, 728—Approval of severe penalties upon chemists for accident or infringement of regulations, 728-733—Usefulness of ergot of rye as an article of medicine, 735—Also of savin, 736.

Burch,

Burch, Samuel Joseph. (Analysis of his Evidence.)—Resident medical officer at the London Hospital, 737—Statistics of cases of poisoning at the London Hospital during each of the years 1846-56; 738—Out of 228 cases brought to the hospital in eleven years, only fifteen have terminated fatally; this has been owing to prompt treatment, 739, 740—Use of poison in the neighbourhood of the London Hospital mainly for self-destruction; considerable dissipation in this district adverted to hereon, 741-743, 749, 750.

Success generally of the Arsenic Act; few poisonings by arsenic, 744-747—Reference to the large sale of laudanum in some parts of Lincoln county some years ago, 747—Less stringent regulations desirable to be applied at first to country districts than to large towns, 748, 749, 758, 759, 766—The facility of procuring poisons should be diminished; measures recommended, 751, 755-760, 766—Illustration of the utter unfiness and want of qualification of vendors of medicine at the present time, 752—Statement as to the office of surgeon being sometimes assumed by unqualified persons; practical want of legal remedy hereon, 752, 767-770.

Particulars as to a case of accidental poisoning by arsenic, the arsenic being supplied by the chemist as a remedy for delirium tremens; infringement of the Arsenic Act in the matter, 752-754, 761-765—Importance of a provision for the qualification of the vendors of certain poisons, such poisons to be defined by Act, 755-761, 766—Certain poisons should not be sold without a witness, 756—Suggested power of examination into the quality of the drugs in chemists' shops, 770—Difficulty of an examination in the case of quack medicines, 771.

C.

Culvert, Frederick Grace. (Analysis of his Evidence.)—Has been connected with the Sanitary Association of Manchester, who have paid much attention to the sale of poisons, and highly approve of the present Bill, 498-500—Increased number of intentional poisonings in Manchester, &c., through the facility in procuring poison, 501, 502—Difficulty at present in tracing where the poison has been bought, *ib.*—Use of arsenic and sugar of lead among the manufacturing population, 503—Inefficiency of the Arsenic Act in Manchester; arsenic is retailed uncoloured, and penalties are not enforced, 504-510.

Anticipated decrease of unintentional poisoning by the regulations in the Bill, 511, 512—Extensive use of laudanum and its preparations in Manchester, both for criminal purposes and for "quieting" children, 512-516—Suggested use of carbo-azotic acid for colouring arsenic and other poisons before sale to the public; peculiar advantages of this substance as a means of colouring, 516-538.

Doubt as to the restrictions proposed in the Bill being any undue interference with the business of druggists, 539—Approval of a certificate in each case of purchase of laudanum or other poison, 540, 547-550—Sundry particulars relative to the regulations in France (where witness lived and practised professionally for many years) for restricting the sale and use of poisons; strictness of these regulations, and advantages consequent thereupon, 540 *et seq.*; 590-592, 622-625—There is no restriction in France if the poison be wanted for trade purposes, 551-454.

Poisoning, especially suicidal poisoning, cannot be prevented, but the facilities of poisoning may be much restricted, 554, 567, 568—Greater number of intentional and accidental poisonings in England than in France, 555-559—In Germany, but not in France, poisons are kept by the druggists in peculiarly shaped or coloured bottles, and in separate cases or closets, 560—Liability of the assistant, in France, if he supply poisons without certificate, 561, 562—Regulations in France providing for the competency of all who practise pharmacy, 562, 563—Increased chance of detection if the purchaser had to go to several shops in order to make up the necessary dose, 569.

Considerable number of intentional poisonings in Manchester and the neighbouring manufacturing districts, 570-577—The proposed restriction as to the shape of bottles containing poisons goes too far, 578, 606, 620, 621—Approval of the provision for a separate poison closet, 578, 579, 621—Further evidence in favour of the colouring of poisons, whether liquid or solid, 580-586—Importance of proper means of enforcing any Act which may be passed, 587-589, 906.

Consideration of the probable effect of the proposed restrictions upon sales by herbalists or itinerant vendors; necessity of applying the Act to these persons, 593-601—Main importance of education and proper qualification in the vendors of drugs, 602—Illustration of the backward state of those who practise pharmacy in this country, 602, 615—On account of the less educated state of chemists in this country than in France, the strict regulations in the latter country are not applicable, 604, 605.

The question of a list or schedule may have some disadvantages, but is, on the whole, desirable; the Schedule in the Bill should be enlarged, 607-609, 615-619—Doubt whether lobelia is a poison, 610—Herbalists in France must be licensed, and cannot

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sell drugs, 611-613—On the whole, witness considers that the Bill cannot be made much better, 614—Evil in the sale of poisons by grocers, 616—Advantage in poison bottles being kept separately in the shop, or coloured in some peculiar way, 621.

Cantharides. Propriety of restriction upon the sale of cantharides, *Abraham* 211-213.

Carbo-azotic Acid. Suggested use of carbo-azotic acid for colouring arsenic and other poisons before sale to the public; peculiar advantages of this substance as a means of colouring, *Calvert* 516-538.

Objections to the use of carbo-azotic acid for colouring arsenic and other poisons, *Taylor* 810, 811. 831-837.

Certificates to Purchasers. Objection to the requirement of the certificate of a clergyman, or one or two resident householders, before any person can obtain poison, *Bell* 5-11—Objection to the proposition that the purchaser should be furnished with a certificate from a magistrate or clergyman, *Herapath* 333-339—Doubt as to the expediency of requiring the magistrates to give certificates to purchasers, *Hammill* 493-496—Approval of a certificate in each case of purchase of laudanum or other poison, *Calvert* 540. 547-550—Under a system of licence, as proposed by witness, a certificate before purchase is not necessary, *Wilson* 653-655.

Approval of a system of certificate as a necessary condition before the supply of the restricted poisons, *Brande* 669, 670; *Taylor* 931-937—Evidence with a view to the adoption, in certain cases, of a system of continuing certificates; difficulties hereon considered, *Taylor* 937, 938. 1166-1171.

Chemical Knowledge. As regards a chemical knowledge of the properties of poisonous substances, &c., a little of such knowledge is dangerous, but proficiency in such matter would be beneficial to all, except as regards the civilly-disposed, *Herapath* 454-462.

Chesham —. Facility for procuring arsenic and other poisons illustrated in the case of a woman, named Chesham, living in Essex; numerous poisonings by this woman, *Taylor* 800-804.

Chloroform. Doubt as to the expediency of restriction upon the sale of chloroform, *Abraham* 232-234. 236-239. 255—Restriction recommended, *Taylor* 846. 871. 1151—Colouring need not apply to chloroform, *ib.* 949.

Cocculus Indicus. Doubt as to cocculus indicus being required for any useful purposes, *Abraham* 242—Suggested restriction upon the sale of cocculus indicus, *Herapath* 313.

College of Physicians (England). Inoperativeness of the present power of the College of Physicians to inspect druggists' shops, *Taylor* 1209-1212.

College of Physicians (Ireland). Effect in law of the rules of the Irish College of Physicians relative to poisons, *Neligan* 1063-1069.

Colouring of Poisons. With regard to the colouring of poisons, witness offers several objections to the enactment in the eighth clause, that "no person shall sell any colourless poison whatever in a solid state, unless the same be, before the sale thereof, mixed with soot or indigo," *Bell* 41-43. 47-49. 53-57—Enumeration of the colourless solids in Schedule (A.), *ib.* 41. 53—Objection also to the ninth clause with regard to the colouring of liquid poisons, *ib.* 44-46.

Any universal colouring matter would greatly increase the danger of the use of poisons, *Morson*, 49, 50—In the case of criminal poisoning a system of colouring would be a false security, and would do harm rather than good, *Waugh* 50-52—Objection to the proposition for colouring certain poisons with archil, *Abraham* 264, 265.

Objection generally to the provisions for colouring solid and liquid poisons, *Herapath* 401-417—Doubt as to the use of archil being at all effectual in colouring fluids, *ib.* 416, 417.

Evidence in favour of the colouring of poisons whether liquid or solid, *Calvert* 516-538. 580-586—Poisons required for commercial purposes should not be coloured, *ib.* 583-585.—Doubt as to the colouring of all poisons being of much use, *Brande* 727, 728.

A colouring of all poisons would be useful as regards accidental poisoning, but scarcely so as regards criminal poisoning, *Taylor* 807—Difficulty in removing the colour, indigo, from arsenic, *ib.* 808, 809—Suggestions relative to the colouring of the several poisons in the Schedule, *ib.* 949-957—Suggested use of archil for the colouring of liquid poisons, *ib.* 949. 956, 957—Opinion that indigo is the best colour in the case of solid poisons, *ib.* 956, 957.

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The colouring of many poisons, as of arsenic, should be enforced, *Neligan* 1102-1107—Approval of the provisions in the Bill for using archil and indigo for colouring, *ib.* 1111-1114.—Indigo is far preferable to soot, *ib.* 1112-1114—Archil is a very fit substance for the purpose of colouring liquid poisons, *ib.* 1112.

See also *Arsenic and Arsenic Act.* *Carbo-azotic Acid.* *Oxide of Manganese.*

Corrosive Sublimate. Suggested extension of the provisions of the Arsenic Act to this poison, *Abraham* 197-202—Inexpediency of restriction as regards the sale of corrosive sublimate, *Herapath* 316, 317, 321-323—Restriction recommended, *Taylor* 846, 871, 1151—Large and unrestricted sale of corrosive sublimate by druggists in Dublin, *Neligan* 1042-1044.

Country Districts. The sale of poisons indiscriminately by miscellaneous shops in small country towns and villages is a great evil; these shops should be prevented from selling, *Brande* 670-679—Less stringent regulations desirable to be applied at first to country districts than to large towns, *Burch* 748, 749, 758, 759, 766—Facility at present of procuring arsenic in country places, as for instance, at Chesham in Buckinghamshire, *Taylor* 794, 795—In country places in Ireland it might be well to license any general dealer as a druggist, under certain regulations, *Neligan* 1077-1080.

Cyanides of Potassium, &c. Difficulty in restricting the sale of cyanides of potassium, mercury, and silver, *Herapath* 326—Restriction recommended in regard to cyanide of potassium, *Taylor* 846, 871, 1151—The colouring of cyanide of potassium would preclude its use in photography, but photographers could readily remove the colouring, *ib.* 939, 951-953.

D.

Deane, Henry. (Analysis of his Evidence.)—See *Bell, Jacob, Peter Squire, &c.*

Deaths. Comparatively small number of deaths from poison, considering the extent of population, *Herapath* 389, 390—Statement showing that there has been of late years a considerable increase in the number of deaths from poison, *Taylor* 778-785—Statement as to the proportion of deaths from each poison; great majority of poisonings before the Arsenic Act, by means of opium and arsenic, *ib.* 786-792.

Definition of Poison. There should be a strict definition in the Bill of the word "poison;" that is, it should mean those substances named in the schedule, *Taylor* 920-924.

Detection. Difficulty at present in tracing where poisons have been bought, *Calvert* 501, 502—Increased chance of detection if the purchaser had to go to several shops in order to make up the necessary dose, *ib.* 569—Besides making it more difficult to obtain poison, much will be gained by rendering detection more easy, *Taylor* 806, 840—Several poisons leave no trace, *ib.* 847.

Dispensaries. As regards the use of peculiar bottles, dispensaries might be excepted from such provision, *Herapath* 403-408—Practice in supplying medicines from dispensaries in Ireland; absence of accident through the use of improper bottles, *Neligan* 1081-1087—Way in which angular bottles might be used in supplies from dispensaries, *ib.* 1089—Improper and dangerous practice at present in regard to the supply of medicines from dispensaries, in such bottles, &c., as the poor may bring, *Taylor* 1195—Dispensaries and hospitals should supply bottles as well as medicines, *ib.* 1195, 1199.

Dublin. Recent inspection by witness and a colleague, of the druggists' shops on the south side of Dublin, and of some of the apothecaries' shops, *Neligan* 980—Result of the recent inspection by witness and Dr. Barker of the druggists' shops; highly objectionable practices discovered in regard to the custody and sale of poisons, *ib.* 1042-1046—Number of druggists in Dublin, *ib.* 1070.

E.

Education. See *Qualification of Vendors.*

Edwards, John Baker. (Analysis of his Evidence.)—See *Abraham, John, &c.*

Enforcement of Act. Importance of proper means of enforcing any Act which may be passed, *Calvert* 587-589, 606; *Neligan* 1124, 1125—Whatever restrictions are adopted they will be of little use unless definite measures are taken for their enforcement, and for the application of penalties; doubt as to the proper machinery to be employed for this purpose, *Taylor* 948, 1201-1209—There should be a public inspector, whose duty should be to enforce the penalties of the Act when violated, *Neligan* 1001, 1002.

Entry and Registration of Sales. Objection to the system of entry and registration of sale, as proposed in the sixth clause, *Bell* 12-22—Present practice of chemists in regard to entries of sales of poisons, *ib.* 13-21—With the exception of arsenic, there is now no
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registration of the sale of poisons, *Bell* 13—The objection applies to the extended list in the schedule, and the complication of the entry, *ib.* 22.

As regards the prevention of criminal poisoning, a record of the names of the purchasers of certain poisons, but not of all poisons, might be kept, *Bell* 144-149—Suggested addition to the amended Bill put in by Mr. Bell, of a clause in regard to registration, *Squire* 173.

Importance of a system of registration as a check upon the purchaser in the case of intentional poisoning, *Herapath* 312. 327-332. 366—Approval of a fine upon the purchaser and seller, if they do not abide by the form of entry and registration, *ib.* 437-439—Under the system of licence proposed by witness, the provisions of the Bill in regard to entry and registration should equally apply, *Wilson* 629—Approval of the provision in regard to entries of sales, *Neligan* 1121, 1122.

Ergot of Rye. Suggested restriction upon the sale of ergot of rye, which is used for purposes of abortion, *Herapath* 313. 408, 409—Usefulness of ergot of rye as an article of medicine, *Brande* 736.

Essential Oil of Bitter Almonds. Essential oil of bitter almonds ought not to be sold undiluted, *Abraham* 203—Restriction recommended upon the sale of this article, *Taylor* 846. 871. 1151.

Examination of Vendors. Importance of the gradual introduction of a system of compulsory examination of chemists, with a view to a proper education, as being the best security to the public in regard to the sale of poisons, *Bell* 63-67—After a certain date all persons vending medicines or poisons should be required to pass an examination, *ib.* 111, 112. 121. 135—Anticipated willingness on the part of young men to come forward for examination if corresponding privilege were thereby conferred in regard to the sale of prohibited medicines, *ib.* 135.

An examination into qualification might safely be left to the Pharmaceutical Society, *Abraham* 293—Consideration of obstacles to the practicability of requiring all vendors of poisons to pass an examination; suggestions hereon, *Brande* 681-695—Bodies by whom the examination might be undertaken, *ib.* 686-688.

Great importance of requiring all persons vending drugs after a certain prescribed period, such as five years, to pass an examination as to their qualification, *Taylor* 863. 875-877. 899-902—Anticipated adequate supply of properly qualified vendors if a period of five years be fixed, after which all must undergo examination, *ib.* 866. 899-901—The examinations should take place before central Boards in London, Edinburgh, and Dublin, *ib.* 867-870—There might be a minor examination for second class certificates, *ib.* 869. 888-893. 903.

Considerations as to the constitution of the council to undertake the proposed examinations and to grant the licences or certificates; three members from the College of Physicians, three from the Apothecaries' Society, and three from the Pharmaceutical Society, would form an efficient body, *Taylor* 878-887. 904-906—Two or three members of the Board should be competent to grant certificates, *ib.* 885, 886—The parties coming before the Board of Examiners might contribute a small fee, *ib.* 887.

System of examination of persons about to practise as apothecaries in Ireland, *Neligan* 1003. 1027-1029.

See also *Assistants (Chemists and Druggists).* *Qualification of Vendors.*

Excise, The. Proposition that the sale of poisons be under the control of the Board of Excise, and that no person be permitted to sell any poisons specified in the schedule in the Act without first having obtained a licence from the Excise, *Wilson* 627 *et seq.*—Discretion proposed to be placed in the Board of Excise in granting or refusing licences, *ib.* 634-636. 641. 656-659—Clauses suggested in order to carry out witness's system, *ib.* 659.

Suggestion that in Ireland the inspection of shops and the enforcement of regulations devolve upon the Excise officers, *Neligan* 1058. 1126-1132. 1136. 1140, 1141.

Doubt whether the Excise officers in this country would be proper persons to undertake inspection and the enforcement of the Act, *Taylor* 1209.

Exemptions. Exception taken to the exemption, in the eleventh section, of a variety of non-professional trades from the operation of the Bill, *Bell* 57-59—Suggested exemption of all registered pharmaceutical chemists from the operation of the Bill, *ib.* 59-62—Explanation as to the amended Bill prepared by the Pharmaceutical Society, proposing to exempt members of the society from its restrictions, *Morson* 167—With a limited schedule there should be no exemptions as regards farmers or others being subject to the restrictions of the Act in effecting purchases, *Herapath* 420-427—As regards the eleventh clause exempting medical prescriptions and wholesale dealing for trades, it might be as well to strike it out altogether, *Taylor* 958-968.

See also *Apothecaries.* *Students.* *Trade Purposes.*

External Applications. See *Bottles.*

F.

Farmers. Suggested privileges to farmers in regard to purchasing certain quantities of arsenic, &c. without limit, *Edwards* 301.—See also *Exemptions*.

Fines. See *Penalties*.

Fowler's Solution of Arsenic. Suggested restriction upon the sale of Fowler's solution of arsenic, *Herapath* 313; *Taylor* 871.

France. In France certain poisons are kept in separate cupboards; the practice is not very strictly carried out, *Bell* 70-74—There is no more precaution taken in France than in this country in regard to keeping poisons, *Morson* 77.

Sundry particulars relative to the regulations in France (where witness lived and practised professionally for many years) for restricting the sale and use of poisons; strictness of these regulations, and advantages consequent thereupon, *Calvert* 540 *et seq.* 590-592. 622-625—Instances of the severity of the law, *ib.* 543. 592—Laudanum in very small quantities may be procured without a certificate, *ib.* 546. 565-567—There is no restriction in France, if the poison be wanted for trade purposes, *ib.* 551-554.

Greater number of intentional and accidental poisonings in England than in France, *Calvert* 555-559—Liability of the assistant in France, if he supply poisons without certificate, *ib.* 561, 562—Regulations in France providing for the competency of all who practise pharmacy, *ib.* 562, 563—There is no defined list of poisons; every chemist sells what he pleases, but it is on his own responsibility, *ib.* 564. 590-592.

On account of the less educated state of chemists in this country than in France, the strict regulations in the latter country are not applicable, *Calvert* 604, 605.

The law in France in regard to the sale of poisons is very strict; mention of the several poisons, nineteen in number, which are restricted in sale, *Taylor* 841-845—Difference between the French list of restricted poisons and the list in the present Bill, *ib.* 845—In France the restricted articles are kept separately, *ib.* 848.

Comparison of the list proposed by witness with the French list, *Taylor* 1143. 1151—Salutary effect of the restrictions in France, *ib.* 1157—Heavy penalties for violation of the law, *ib.* 1205—Strict prohibitions upon the use of arsenic, *ib.* 1206.

G.

Germany. In Germany, but not in France, poisons are kept by the druggists in peculiarly shaped or coloured bottles, and in separate cases or closets, *Calvert* 560.

Grocers. Evil in the sale of poisons by grocers, *Calvert* 616—Objection to the power of druggists and grocers in Ireland to sell poisons without restriction, *Neligan* 1010-1015.

See also *Restrictions*. *Vendors*.

Guy's Hospital. Statistics relative to deaths at Guy's Hospital from poison during the last few years, *Taylor* 789-792.

H.

Hammill, John. (Analysis of his Evidence).—As Police Magistrate at Worship-street has seen many instances in which laudanum seemed to have been sold very incautiously and improperly to wretched-looking persons whose object was suicide, 468-477—Difficulty as regards legislative enactment restricting the sale of laudanum to poor persons, 470. 478. 482-488. 491, 492—Only one case of arsenic poisoning was brought before witness in ten years, 471. 489, 490—Instance of a case of poison by means of sulphate of potash, 471, 472. 481—It might be of use to require poor persons (as well as others) to sign their name or put their mark in each case of purchase of laudanum, 486-488—Doubt as to the expediency of requiring magistrates to give certificates to purchasers, 493-496.

Hemlock. Non-objection to restriction upon the sale of hemlock, *Abraham* 214, 215—Proposed restriction upon the sale of hemlock, *Taylor* 1151.

Herapath, William. (Analysis of his Evidence).—With reference to the Arsenic Act, witness considers that whilst it has lessened poisonings by arsenic it has driven the secret poisoner to other poisons more difficult to detect, 307-309. 393-396. 465, 466—Doubt whether any restriction upon the sale of poisons will prevent suicide by poison, 310, 311—Importance of a system of registration as a check upon the purchaser in the case of intentional poisoning, 312. 327-332. 366.

Objection to applying legislative restriction to all the articles comprised in the Schedule of the Bill, 313. 315—Practical difficulty and inconvenience of restriction upon 294—Sess. 2. the

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the sale of opium or laudanum, 313-315. 345-354—Limited schedule or list of persons proposed by witness to be restricted in sale, that is to say, those only which are not to be recognised by the victim, 313. 355. 365. 374—Objection to a system of a separate poison closet comprising numerous poisons, *ib.*

Inexpediency of restriction as regards the sale of corrosive sublimate, 316, 317. 321-323—Arsenic should be included in the Schedule, but the compounds of arsenic need not be included, 318, 319—The poisonous vegetable alkaloids might with advantage be restricted in sale, 324—Some restriction should be placed on the sale of prussic acid, 325—Difficulty in restricting the sale of cyanides of potassium, mercury, and silver, 326.

Objections to the proposition that the purchaser should be furnished with a certificate from a magistrate or clergyman, 333-339—Advantage of requiring the attendance of a witness, rather than of requiring a certificate, in the case of each purchase, 339-343—All preparations or compound should be severally specified in the Schedule, 356 428-431—Many poisons are not included in the Schedule and are obtainable at the shops of grocers, &c., 356—Tendency of an enlarged Schedule to draw the attention of persons to poisons not before known to them, 357-362.

Inefficiency of the Bill in not placing a restriction upon patent medicines; difficulty hereon, 362-364—Advantage of limiting the sale of the more dangerous poisons to properly qualified persons, 367-376—Difficulty in at once finding qualified persons for all druggists' shops throughout the country, 367-369. 376—Gradual education of druggists through means of the Pharmaceutical Society, 368—Objection to at once restricting the sale of all poisonous substances to qualified vendors, 370, 371. 376.

Approval of a provision that poisons, that is, a limited number of them, be sold by the chemist in bottles of a peculiar shape or colour, 377-380. 392. 401-404. 443-446—Peculiar labels should also be attached by the chemist, 377, 378—Further disapproval of a separate poison closet, 378—Objections to a provision that poisons after coming into the hands of the public must still be kept in peculiarly shaped bottles; inexpediency of a penalty on this point, 379-392. 401, 402.

Probability of a restriction upon the sale of other poisons, besides arsenic, having the same effect as regards them, that the Arsenic Act has had as regards arsenic, 396—Approval of additions to the Schedule from time to time; these might be adopted by the Secretary of State in communication with the Pharmaceutical Society, 397-400—As regards the use of peculiar bottles dispensaries might be excepted from such provision, 403-408—Advantage of including in the Schedule medicines used for abortion, 408, 409.

Objection generally to the provisions for colouring solid and liquid poisons, 410-417—Objection to the provision in clause ten, that if any poison be furnished by one person to another, the same shall be deemed a sale, 418, 419—With a limited Schedule there should be no exemptions as regards farmers or others being subject to the restrictions of the Act in effecting purchases, 420-427.

Further evidence and suggestions relative to the several poisons to be included in the Schedule, 428-434. 467—Tendency of too wide a distinction to raise up a low set of dealers who would sell clandestinely, 435, 436—Approval of a fine upon the purchaser and seller if they do not abide by the form of entry and registration, 437-439—Objection to the heavy penalties proposed to be inflicted; suggested amendment, 440-442—The chief security is in the employment of qualified vendors, 443. 451.

Further evidence as to the mischief to be apprehended from including in the Schedule a long list of poisons hitherto not generally known, 447-464—As regards a chemical knowledge of the properties of poisonous substances, &c., a little such knowledge is dangerous, but proficiency in such matter would be beneficial to all, except as regards the evilly disposed, 454-462.

Herbalists. Belief that there is more danger from the unlimited sale of herbs than from the articles in druggists' shops, *Herapath* 434—Consideration of the probable effect of the proposed restrictions upon sales by herbalists or itinerant vendors; necessity of applying the Act to those persons, *Calvert* 593-601—Herbalists in France must be licensed, and cannot sell drugs, *ib.* 611-613—Importance of imposing due restrictions upon herbalists in regard to the sale of hemlock, belladonna, &c., *Taylor* 1158-1165.

Horse Medicines. Horse medicines containing poisons should be kept in peculiarly-shaped bottles, *Taylor* 1200.

I.

Inspection of Druggists' Shops. Suggested power of examination into the quality of the drugs in chemists' shops, *Birch* 771.

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Inspection of Druggists' Shops—continued.

Witness is one of Inspectors of Apothecaries' and Druggists' Shops under the Irish Act of 1761, *Neligan* 971, 972—Remarks relative to the power of inspection of druggists' shops under the Act of 1761, and to the inoperativeness of such power through the want of properly appointed inspectors, *ib.* 991-1000—Chief object of the inspection by the Irish College of Physicians to see to the purity of the drugs, *ib.* 1133, 1134.

Ireland. Distinction between apothecaries and druggists in Ireland; the former may make up prescriptions and sell drugs, the latter can merely sell drugs, *Neligan* 981-989—Objection to the power of druggists and grocers in Ireland to sell poisons without restriction, *ib.* 1010-1015—Fewer poisonings in Ireland than England, *ib.* 1033—Belief that many poisonings occur in Ireland without being found out; objection hereon to the system of payment of coroners and of coroners' surgeons, *ib.* 1033-1039.

Beneficial check upon the indiscriminate sale of poisons in Ireland if all druggists were licensed, and if mere grocers were not allowed to sell poisons, *Neligan* 1054-1058. 1128, 1129. 1136—Approval of the sale of dangerous poisons being restricted to the apothecaries, *ib.* 1071-1076—Tolerably pure state generally of drugs in Ireland, *ib.* 1135.

See also *Arsenic and Arsenic Act.* *Bottles.* *Dublin.* *Examination of Vendors.*
Qualification of Vendors.

L.

Labels. The labelling of everything with the word "poison" is the best possible safeguard, *Bell* 24. 36-38—Exception taken to the provision in the Bill in regard to the kind of labels to be used, *ib.* 106—The restrictions with regard to the labelling of external substances may be beneficial, *ib.* 111—Further objection to the provision in regard to the kind of labels to be used on bottles containing poison, *ib.* 174.

Approval of a label upon each poison sold, or of some distinctive mark removable from the bottle if used for any other purpose, *Abraham* 261-263. 268—Peculiar labels should be attached by the chemists, *Herapath* 377, 378—Advantage of labelling each poisonous substance with the word "poison," *Brande* 726—A covering of tinfoil as a distinct label is not so desirable as selling all poisons in bottles, *Neligan* 1123.

See also *Bottles.*

Laudanum. Probable effect of the Bill in restraining the sale of laudanum and opium by grocers and others, *Bell* 91—Objection, on the whole, to restriction upon the sale of opium and its preparations, such as laudanum, &c., *Abraham* 218-232—The sale of opium and its preparations should ultimately be confined to well-qualified vendors, *Edwards* 282-290—Practical difficulty and inconvenience of restriction upon the sale of opium or laudanum, *Herapath* 313-315. 345-354—Difficulty as regards registration in the case of each small quantity of laudanum sold, *ib.* 348.

As police magistrate at Worship-street, witness has seen many instances in which laudanum seemed to have been sold very incautiously and improperly to wretched-looking persons whose object was suicide, *Hamill* 468-477—Difficulty as regards legislative enactment restricting the sale of laudanum to poor persons, *ib.* 470. 478. 482-488. 491, 492—It might be of use to require poor persons, as well as others, to sign their name or put their mark in each case of purchase of laudanum, *ib.* 486-488.

Extensive use of laudanum and its preparations in Manchester, both for criminal purposes and for "quieting" children, *Calvert* 512-516—Large proportion of poisonings by laudanum, as shown by a return from the London Hospital, *Burch* 738—Reference to the large sale of laudanum in some parts of the county of Lincoln, some years ago, *ib.* 747.

Consideration of the obstacles to a restriction upon the sale of opium, or rather laudanum; suggestions hereon, *Taylor* 846. 852-862. 871. 1151—Adults requiring laudanum for toothache, &c., should drink it in the shop, *ib.* 853. 862—As so many deaths occur from the use of laudanum, it is essential to restrict its sale, *ib.* 859.

Further statement as to the expediency of restricting the sale of laudanum, though probably attended with some inconvenience, *Taylor* 1153-1156—Advantage of its being administered in the shop, *ib.* 1155, 1156—The deaths from laudanum are mostly among children, *ib.* 1213.

Leeds. Remarks on the circumstance of there being no less than 1,700 persons in Leeds who sell drugs, *Abraham* 251.

Legislation. Legislation, as in the Bill, commences at the wrong end, *Bell* 104—Doubt whether legislation can do much towards preventing poisoning, *Abraham* 190—On the whole, witness considers that the Bill cannot be made much better, *Calvert* 614—Legislation cannot altogether prevent criminal or suicidal poisoning, *Taylor* 805. 840—Advantage of repealing the Arsenic Act, and having but one general Act, *ib.* 920

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Legislation—continued.

—Legislation, without causing some inconvenience and expense, would be difficult, but may be very desirable, *Taylor* 946.

See also *Arsenic and Arsenic Act. Restrictions.*

Licensed Vendors. Proposition that no person be allowed to sell any poisons specified in the Bill without having first obtained a licence from the Board of Excise, *Wilson* 627 *et seq.*—Clauses suggested in order to carry out witness's system of licensing; advantage of the system, *ib.* 659—Proposition that at the end of three years from the passing of the Act a licence should not be granted unless the party could prove himself duly qualified, *ib.*—The sum to be paid for a licence should be moderate, such as 10 s. 6 d. a year, *ib.*—See also *Qualification of Vendors.*

List or Schedule. The Bill comprises only a very limited section of the list of poisons, and would not be effectual in its present form, *Bell* 92—Statement to the effect that there are as many poisons not enumerated under the prohibitions of the Bill as are enumerated, *ib.* 100, 101—Necessity of reducing the schedule very considerably in order to make the Bill practicable, *ib.* 103, 104.

List of poisons to which the provisions of the Arsenic Act might with advantage be applied, *Abraham* 196, 197—Circumstance of the schedule not comprising a great number of very dangerous poisons, *ib.* 245—Advantage of preparing a schedule comprising certain articles, the sale of which should be confined to qualified pharmaceutical chemists, *Edwards* 274-290.

Limited schedule or list of poisons proposed by witness to be restricted in sale, that is to say, those only which are not to be recognised by the victim, *Herapath* 213. 355. 365. 374—Legislation should be limited to a few poisons, *ib.* 313. 365—Many poisons are not included in the schedule, and are obtainable at the shops of grocers, &c., 356—Evidence as to the mischief to be apprehended from including in the schedule a long list of poisons hitherto not generally known, *ib.* 357-362. 447-464—Further evidence and suggestions relative to the several poisons to be included in the schedule, *ib.* 428-434. 467.

The question of a list or schedule may have some disadvantages, but is, on the whole, desirable; the schedule in the Bill should be enlarged, *Calvert* 607-609. 615-619—Difficulty of defining by Act of Parliament the several poisons to be restricted, *Brande* 697.

Recommended restriction of the English list from twenty-three to thirteen articles; list proposed, *Taylor* 845, 846. 871—Further evidence in favour of the reduced list or schedule proposed by witness; suggested addition of aconite, hemlock, and phosphorus paste, making altogether sixteen articles, *ib.* 1142-1151.

See also *Additions to Schedule. Restrictions.*

Liverpool. Statement showing the few cases of accidental or criminal poisoning in Liverpool, *Abraham* 300.

Liverpool Chemists' Association. Mr. Edwards and witness, who are pharmaceutical chemists, represent the Liverpool Chemists' Association, *Abraham* 187-189—Grounds upon which the association has petitioned against the Bill, *ib.* 191 *et seq.*

Lobelia. Lobelia is a poison, but there is no danger of its being used feloniously, *Abraham* 245—Approval of lobelia being included in the schedule, *Herapath* 434—Doubt whether lobelia is a poison, *Calvert* 610.

London Hospital. Statistics of cases of poisoning at the London Hospital during each of the years 1846-56, *Burch* 738—Out of 228 cases brought to the hospital in eleven years only fifteen have terminated fatally; this has been owing to prompt treatment, *ib.* 739, 740—Use of poison in the neighbourhood of the London Hospital mainly for self-destruction; considerable dissipation in this district adverted to hereon, *ib.* 741-743. 749, 750.

M.

Maclagan, Dr. Reference to a communication from Dr. Maclagan, of Edinburgh, objecting to the requirement in the Bill in regard to the use of peculiarly shaped bottles for containing poison, *Bell* 175, 176. 178-180.

Manchester Sanitary Association. Witness has been connected with the Sanitary Association of Manchester, who have paid much attention to the sale of poisons, and highly approve of the present Bill, *Calvert* 498-500.

Manufacturing Districts. Increased number of intentional poisonings in Manchester, &c., through the facility of procuring poisons, *Calvert* 501, 502—Use of arsenic and sugar of lead among the manufacturing population, *ib.* 503—Inefficiency of the Arsenic Act in

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in Manchester; arsenic is retailed uncoloured, and penalties are not enforced, *Calvert* 504-510—Considerable number of intentional poisonings in Manchester and the neighbouring manufacturing districts, *ib.* 570-577.

Morson, Thomas Newborn Robert. (Analysis of his Evidence.)—See *Bell, Jacob, Thomas Newborn Robert Morson, &c.* *Bell, Jacob, Peter Squire, &c.*

N.

Neligan, John Moore, M.D. (Analysis of his Evidence.)—Fellow of the Irish College of Physicians, also one of the present censors of the college, 969-971—Is one of the inspectors of apothecaries' and druggists' shops under the Irish Act of 1761; 971, 972—Reference to some new rules promulgated a year or two ago by the Irish College of Physicians, and made at witness's suggestion, as to the use of angular and round bottles by druggists in keeping and dispensing certain poisons, 973-978—Under the Act of 1794 arsenic is required to be kept separately, and under lock and key, 979.

Recent inspection by witness and a colleague of the druggists' shops on the south side of Dublin, and of some of the apothecaries' shops, 980—Distinction between apothecaries and druggists in Ireland; the former may make up prescriptions and sell drugs, the latter can merely sell drugs, 981-989—The rules of the College of Physicians relative to keeping certain poisons in angular bottles have not been observed in Dublin to any extent, 990.

Remarks relative to the power of inspection of druggists' shops under the Act of 1761, and to the inoperativeness of such power through the want of properly-appointed inspectors, 991-1000—There should be a public inspector, whose duty should be to enforce the penalties of the Act when violated, 1001, 1002—System of examination of persons about to practise as apothecaries in Ireland, 1003. 1027-1029—Explanation relative to and in approval of the restriction in Ireland, that medicines cannot be dispensed save by parties who have qualified themselves on examination before the Apothecaries' Company; steps taken to enforce the restriction, 1004-1009. 1016-1026.

Objection to the power of druggists and grocers in Ireland to sell poisons without restriction, 1010-1015—Large sales of oxalic acid by some Irish druggists, 1014, 1015. 1042—Good character, and slight expense of the education undergone by the apothecaries, 1025-1032—Fewer poisonings in Ireland than England, 1033—Belief that many poisonings occur in Ireland without being found out; objection hereon to the system of payment of coroners and coroners' surgeons, 1033-1039.

Evidence relative to and in condemnation of the practice in Ireland in regard to the sale of arsenic; it is not kept separate from other drugs, and is sold uncoloured, 1039-1044—Result of the recent inspection by witness and Dr. Barker of druggists' shops in Dublin; highly objectionable practices discovered by them, 1042-1046—Indiscriminate sale of laudanum in Dublin and the country; instances of accidents therefrom, 1042. 1047-1053—Reference to the recent accidental death from arsenic of the Rev. Mr. Alexander, living near Tullamore, 1044.

Beneficial check upon the indiscriminate sale of poisons in Ireland, if all druggists were licensed, and if mere grocers were not allowed to sell poisons, 1054-1058. 1128, 1129. 1136—An examination as to qualification previous to the licensing of druggists would not be essential if proper regulations were enforced, 1057-1060. 1077-1080—Suggestion that the inspection and the enforcement of regulations devolve upon the Excise officers, 1058. 1126-1132. 1136. 1140, 1141.

Circumstances under which witness recommended in a recent supplement to the Pharmacopœia that all apothecaries should sell their poisons in angular bottles, 1061, 1062—Effect in law of the rules of the Irish College of Physicians relative to poisons, 1063-1069—Number of druggists in Dublin, 1070—Approval of the sale of dangerous poisons being restricted to the apothecaries, 1071-1076—In country places it might be well to license any general dealer as a druggist, under certain regulations, 1077-1080—Practice in supplying medicines from dispensaries in Ireland; absence of accident through the use of improper bottles, 1081-1087.

Evidence in support of the use of angular bottles for containing all poisons supplied to the public; few exceptions necessary to this rule, 1088-1100—Way in which angular bottles might be used in supplies from dispensaries, 1089—In the case of medical prescriptions comprising poisonous substances, round bottles should be used, 1094. 1096—The schedule in the Bill should be extended as regards the poisons to be kept or sold in angular bottles, 1098, 1099—The colouring of many poisons, as well as of arsenic, should be enforced, 1102-1107.

Approval of the provisions in the Bill for using archil and indigo for colouring, 1111-1114—Approval of the clause requiring that poison shall be sold only to a person of full age and in the presence of a witness, 1115-1117—Advantage if the principal only
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were allowed to sell poisons, 1117, 1118. 1136—Approval of the provision in regard to entries of sales, 1121, 1122—A covering of tinfoil or a distinct label is not so desirable as selling all poisons in bottles, 1123.

Whatever regulations be adopted, means must be taken for their enforcement, 1124, 1125—Chief object of the inspection by the Irish College of Physicians, to see to the purity of the drugs, 1133, 1134—Tolerably pure state generally of drugs in Ireland, 1135—Importance of regulations for keeping poisons separate from all other drugs, whether in apothecaries', druggists', or grocers' shops, 1137-1139—An offence for the third time might be followed by withdrawal of licence, 1140.

Nomenclature. Objection to the twelfth clause, on the ground of the provision with regard to the proper English name; doubt as to there being any accidents in consequence of ignorance as to the meaning of the Latin term, *Waugh* 93-96.

Notoriety. Tendency of an enlarged schedule to draw the attention of persons to poisons heretofore not known to them, *Herapath* 357-362. 447-464—Advantage of drawing the attention of the pharmaceutical body to the fact of substances being poisons which they do not now know to be such, *Calvert* 615. 619.

Nux Vomica. There is no necessity for restriction upon the sale of nux vomica, *Abraham* 240—Suggested restriction upon the sale of nux vomica, *Herapath* 313; *Taylor* 846. 871. 1151.

O.

Opium. Question as to the expediency of requiring a record in cases of purchase of opium, *Bell* 149-151—Tendency of the Bill to throw the sale of opium into the hands of a low class of persons, *Abraham* 191-216. 222-224—Objection, on the whole, to restrictions upon the sale of opium and its preparations, *ib.* 218-232.

Evidence with a view to restrictions upon the sale of opium and its compounds, though attended with some difficulty and inconvenience, *Edwards* 282-290; *Herapath* 313-315. 345-354; *Hammill* 482-488—Opium should not be sold without a licence, *Wilson* 651—Restrictions recommended upon the sale of opium, *Taylor* 846. 871. 1151.

See also *Laudanum*.

Oxalic Acid. A restriction upon the sale of oxalic acid would not cause much inconvenience, *Brande* 677, 678—Large number of poisonings by oxalic acid, as shown by a return from the London Hospital, *Burch* 738—Restriction recommended upon the sale of this poison, *Taylor* 846. 871. 1151—Large sales of oxalic acid by some Irish druggists, *Neligan* 1014, 1015. 1042—Oxalic acid and salt of sorrel are hardly ever used in medicine, *Taylor* 1152, 1153.

Oxide of Manganese. Black oxide of manganese would be better than soot or indigo for colouring arsenic, *Herapath* 410-414—Objection to black oxide of manganese as a colouring substance to be mixed with arsenic, &c., *Calvert* 530-535; *Taylor* 1177.

P.

Patent Medicines. Inefficiency of the Bill in not placing a restriction upon patent medicines; difficulty hereon, *Herapath* 362-364—Difficulty of an examination in the case of quack medicines, *Burch* 771—Vendors of patent medicines containing poisons should prove their competency before the proposed examiners, *Taylor* 911, 912.

Penalties. Objection to the provision in the thirteenth clause, that for a second offence the offender is to be disabled from carrying on business, *Bell* 100—Suggested lower penalty than is proposed for first offences, *ib.*

Objection to the heavy penalties proposed to be inflicted; suggested amendments, *Abraham* 246-249. 295-299; *Herapath* 440-442—The Act should lay down certain regulations, which, if violated, should cause the withdrawal of the licence, *Wilson* 642-649—Insufficient provision in the Bill in regard to penalties, *ib.* 659.

Approval of severe penalties upon chemists for accident or infringement of regulations, *Brande* 728-733—An offence for the third time might be followed by withdrawal of licence, *Neligan* 1140.

See also *Enforcement of Act*.

Pharmaceutical Society. Witness represents the Pharmaceutical Society, *Bell* 1—Date of establishment, objects, and operation of the society, *ib.* 2—It was founded in 1842, *ib.*—It has expended nearly 3,000*l.* a year in promoting the education, &c., of chemists, *ib.*

Pharmaceutical Society—continued.

Views of the society in opposition to several of the proposed restrictions upon the sale of poisons, *Bell 2, et seq.*—It has always been the opinion of the society that security would be better effected by an attention to the intelligence and qualification of the vendor than by any arbitrary regulations, as proposed in the Bill, *ib. 2. 63*—The society rejects about two candidates in every ten who present themselves for examination, *ib. 68*—There is not at present any actual restriction with reference to the competency of the assistants employed by members of the Pharmaceutical Society, *ib. 80-83*—System of examination undergone by some assistants, *ib. 81*.

Witness delivers in a copy of the Bill with such alterations in it as would render it unobjectionable to himself and other members of the Pharmaceutical Society, *Bell 97-99*—Reference to certain resolutions of the decisions of the society, upon which the Arsenic Act was founded, *ib. 105, 106*—Opinion of the society that the Bill even if amended must be a very partial and ineffectual measure, *ib. 107-109*—The society desires merely that all those who sell poisons may be properly qualified persons, *ib. 108. 111, 112*—Outline of the general views of the society, *ib. 110, 111*.

Immense good effected by the society though merely a voluntary association, *Bell 128 141*—There is but one general Pharmaceutical Society, but there are some auxiliary societies, *ib. 129, 130*—Check to the usefulness of the society in its examinations being voluntary, *ib. 135*.

Object of the society in amending the Bill to make it unobjectionable, and at the same time in some respects beneficial, *Morson 166*.

Largely increasing number of qualified assistants and principles through the operations of the Pharmaceutical Society, *Abraham 290; Herapath 368*.

See also *Additions to Schedule. Examination of Vendors. Exemptions. Qualification of Vendors.*

Phosphorus. Proposed restriction upon the sale of phosphorus paste, *Taylor 1148-1151*.

Poison Closet. See *Separate Poison Closet*.

Preparations or Compounds. Objection generally to the term "its compounds," or "its preparations;" each article should be specially defined, *Edwards 302-304*—All preparations or compounds should be severally specified in the schedule, *Herapath 356. 428-431*.

Private Use. Objection to the provision in clause ten, that if any poison be furnished by one person to another the same shall be deemed a sale, *Herapath 418, 419*.

Prussia. Limited extent of poisoning in Prussia, *Bell 85*—Beneficial effect of the requirements in Prussia in regard to the education of chemists, and the sale and custody of drugs, *Squire 168-172*—Check in Prussia upon the use of green copper colours containing arsenic, *Taylor 824*—Comparison of the proposed list with the list in force in Prussia, comprising seventeen articles, *Taylor 1143-1151*—Great benefits consequent upon the restrictions in force in Prussia, *ib. 1156, 1157*.

Prussic Acid. Some restriction should be placed on the sale of prussic acid, *Herapath 325*—Uselessness of colouring prussic acid, *ib. 415, 416*—Prussic acid is easy of detection, *ib. 417*—Restriction recommended, *Taylor 846-871. 1151*—Importance of colouring prussic acid with archil, *ib. 949. 956*.

Purchasers. Approval of an extension to several poisons of the provisions of the Arsenic Act, that the purchaser must be known to the vendor, *Abraham 252-256*.

See also *Age of Vendors and Purchasers. Certificate to Purchasers. Witness of Purchase.*

Q.

Quack Medicines. See *Patent Medicines*.

Qualification of Vendors. Gradual education of druggists through means of the Pharmaceutical Society, *Bell 2; Abraham 290; Herapath 368*—Main importance in the first instance of securing a proper qualification in all vendors of drugs by means of compulsory examination, *Bell 63 et seq.*—Remarks on a resolution of the Pharmaceutical Society, that the unrestricted sale of poisons by unqualified persons is the great source of danger, *ib. 105, 106*—Advantage if the sale of poisons were confined to qualified vendors, and if it were feasible to exclude from the register many persons now authorised to sell poisons, *ib. 127*.

Concurrence of witness, Mr. Squire, Mr. Bird, and Mr. Deane, with the evidence of Mr. Bell as to the main importance of proper education in the vendors of poisons, *Morson 164, 165*.

Qualification of Vendors—continued.

Security can best be attained by restricting the sale of poisons to competent and educated vendors, *Abraham* 190. 215—Tendency of the Bill to throw the sale of poisons into the hands of a very low class of shopkeepers, *ib.* 191. 216. 222-224—Concurrence in Mr. Abraham's views as to an extension of the Arsenic Act to certain other poisons, the main points however being that all persons selling poisons should be properly qualified, *Edwards* 257-259.

Advantage of limiting the sale of the more dangerous poisons to properly qualified persons, *Herapath* 367-376—Difficulty in at once finding qualified persons for all druggists' shops throughout the country, *ib.* 367-369. 376—Objection to at once restricting the sale of all poisonous substances to qualified vendors, *ib.* 370, 371. 376—The chief security is the employment of qualified vendors, *ib.* 443. 451.

Main importance of education and proper qualification in the vendors of drugs, *Calvert* 602—Illustration of the backward state of those who practice pharmacy in this country, *ib.* 602. 615.

Witness's plan of licensing does not contemplate any examination into the education or competency of drug vendors generally, *Wilson* 628-630—Restriction advisable to be placed upon the qualification of persons selling the more dangerous poisons, *ib.* 638-641.

No poison should be sold save by properly qualified persons who have proved their competency on examination, *Brande* 679 *et seq.*—Less stringent regulations necessary if the vendors be properly educated and qualified, *ib.* 699—The main point to be urged is the qualification of the vendor, *ib.* 707-710.

Illustration of the utter unfitness and want of qualification of vendors of medicines at the present time, *Burch* 752—Importance of a provision for the qualification of the vendors of poisons, such poisons to be defined by Act, *ib.* 755-761. 766.

Statement showing that a very large portion of the persons engaged in the sale of drugs in this country are not qualified as chemists and druggists, *Taylor* 858—Evidence strongly in favour of requiring a certain amount of qualification after a time to be named in the Bill, *ib.* 863 *et seq.*; 1179—Evidence as to the expediency, on some grounds, of second-class licences or certificates being granted, *ib.* 869. 888-893. 903.

Explanation relative to, and in approval of, the restriction in Ireland, that medicines cannot be dispensed save by parties who have qualified themselves on examination before the Apothecaries' Company; steps taken to enforce the restriction, *Neligan* 1004-1009. 1016-1026—Good character and slight expense of the education undergone by the Apothecaries in Ireland, *ib.* 1025-1032—An examination as to qualification previous to the licensing of druggists would not be essential if proper regulations were enforced, *ib.* 1057-1060. 1077-1080.

See also *Age of Vendors and Purchasers.* *Assistants (Chemists and Druggists).*
Examination of Vendors.

R.

Refusal of Sale. The vendor should be empowered to refuse, arbitrarily, to sell poisons to any one not known to him, or whose motives he may suspect, *Brande* 720; *Taylor* 938.

Register of Vendors. In the first instance a register should be made of all persons dealing in poisons, *Bell* 111-120—All persons not registered should be precluded from selling poisons, *ib.* 111—Those now dispensing drugs should be registered, but their examination and licensing after a given time would be a great advantage, *Taylor* 863-865. 875-877.

Registration of Sale. See *Entry and Registration of Sale.*

Restrictions. Objection to the difficulties proposed to be placed in the way of the purchase of several substances mentioned in the schedule, *Bell* 5-11—A prohibition to sell poisonous substances would be almost a prohibition upon the business of a chemist, *ib.* 136, 137—Tendency of the restrictions of the Bill to induce people to provide themselves on opportunity with a supply of poison in case of need, *Abraham* 191. 194. 225, 226; *Edwards* 289.

Evidence relative to the several poisons or poisonous substances in the list contained in the schedule; expediency or otherwise of restriction on the sale of each, *Abraham* 197-245—Grounds for concluding that a serious inconvenience to the public, without obstruction to the object of the criminal, would be the result of the proposed restrictions upon the sale of the numerous articles in Schedule (A.), *ib.* 300.

Objection to applying legislative restriction to all the articles comprised in the schedule of the Bill, *Herapath* 313. 315—Probability of a restriction upon the sale of other poisons

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poisons besides arsenic having the same effect, as regards them, that the Arsenic Act has had as regards arsenic, *Herapath* 396.

Doubt as to the restrictions proposed in the Bill being any undue interference with the business of druggists, *Calvert* 539 — Poisoning, especially suicidal poisoning, cannot be prevented, but the facilities for poisoning may be much restricted, *ib.* 554. 567, 568.

Witness considers that the Bill before the Committee is, in some respects, based upon sound principles, but that its regulations are too stringent, *Wilson* 626.

Impracticability of restricting by law the sale of all poisonous substances, such as phosphorus, &c., or of quack medicines, *Brande* 710-715 — Impracticability by any regulations of preventing suicidal or criminal poisoning, *ib.* 726 — The facility of procuring poisons should be diminished; measures recommended, *Burch* 751. 755-760. 766.

Expediency of a check upon the facilities for obtaining poison, *Taylor* 777. 793 — The proposed restrictions upon thirteen poisonous substances would not materially interfere with the business of druggists in town or country, *ib.* 871-874 — Suggested enactments on the condition that licences are not required, *ib.* 920 *et seq.* — Great protection of life generally, if restrictions be placed on the sale of poisons in the proposed schedule; numerous cases of accidental deaths adverted to hereon, *ib.* 1212-1216.

See also *Age of Vendors and Purchasers.* *Alkaloidal Poisons.* *Arsenic and Arsenic Act.* *Belladonna.* *Bottles.* *Cantharides.* *Certificates to Purchasers.* *Chloroform.* *Cocculus Indicus.* *Colouring of Poisons.* *Corrosive Sublimate.* *Country Districts.* *Cyanides of Potassium, &c.* *Entry and Registration of Sales.* *Essential Oil of Bitter Almonds.* *Examination of Vendors.* *Excise, The.* *France.* *Grocers.* *Herbalists.* *Labels.* *Laudanum.* *Licensed Vendors.* *List or Schedule.* *Nux Vomica.* *Opium.* *Oxalic Acid.* *Phosphorus.* *Prussic Acid.* *Qualification of Vendors.* *Savin.* *Separate Poison Closet.* *Sorrel, Salt of.* *Strychnia.* *Witness of Purchase.*

S.

Salts of Mercury. Considerable number of poisonings by salts of mercury, as shown by a return from the London Hospital, *Burch* 738.

Savin. Savin, which is used to produce abortion, should not be sold without careful inquiry, *Abraham* 244 — Suggested restriction upon the sale of oil of savin, *Abraham* 197; *Herapath* 313. 408, 409 — Usefulness of savin as a medicinal article, *Brande* 737.

Schedule. See *List or Schedule.*

Separate Poison Closet. Objection to the provision in the twelfth clause requiring vendors to keep all poisons in a separate chest or cupboard, *Bell* 69. 78, 79 — Considerable difficulty, in practice, in keeping the poisons separate, *ib.* 69. 79 — To keep all poisons in a separate cupboard would not be practicable or safe, *Waugh* 69 — The cupboard would be in use all day, and could not be kept under lock and key, *Bell* 69.

Practice in foreign countries in regard to keeping poisons in separate cupboards, *Bell* 70-76 — Further reference to the proposition for a poison closet as being impracticable, *ib.* 100-102 — Objection to a system of a separate poison closet comprising numerous poisons, *Herapath* 213. 255. 265. 274. 378.

Approval of the provision for a separate poison closet, *Calvert* 578, 579. 621 — Advantage in poison bottles being kept separately in the shop or coloured in some peculiar way, *ib.* 621 — Approval of the regulations in the Bill in regard to a separate poison closet, *Wilson* 652 — Obstacles to a separate poison closet which should contain all poisonous substances, *Brande* 705, 706.

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